



2010 New Products



Video Surveillance Systems

Samsung Security Solutions

With the worldwide threat of crime and terrorism increasing daily, the demand for high quality video surveillance systems is also growing rapidly. Users are demanding new capabilities and greater efficiency from their security systems. Samsung Techwin is dedicated to the goal of producing high performance products that introduce features and capabilities that push the boundaries of what can be done with those products. We are redefining what you should expect from a video surveillance systems.



Your Source for Professional Video Surveillance Systems



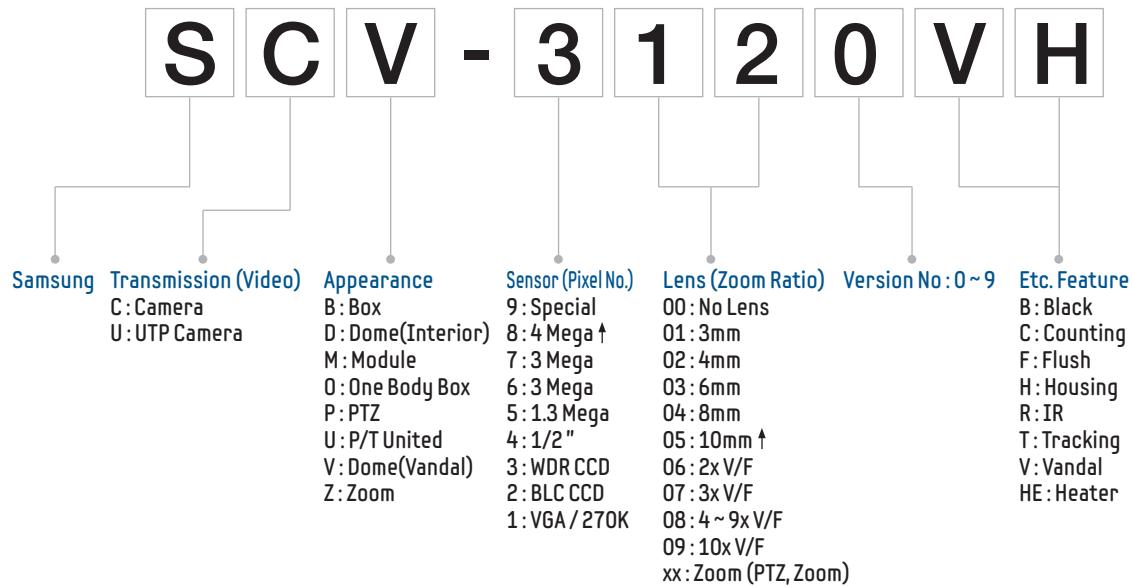
Samsung Techwin was founded in 1977 as Part of Samsung's Machinery and Heavy Industries Group. This group has specialized in a wide range of high technology products such as semiconductor manufacturing systems, turbine engines, and defense systems. The need for advanced optical and image processing technologies came from the company's activities in these areas. After years of successful development of advanced optics and digital processing technology, the Security Solution division was created to provide commercial security products from these technologies. What you see in this catalog is not just another version of video security products produced from off the shelf components. Samsung Techwin's video surveillance products are based upon cutting edge technologies that are unique in the security industry. When you try our products you will experience the difference that these technologies provide.

SAMSUNG

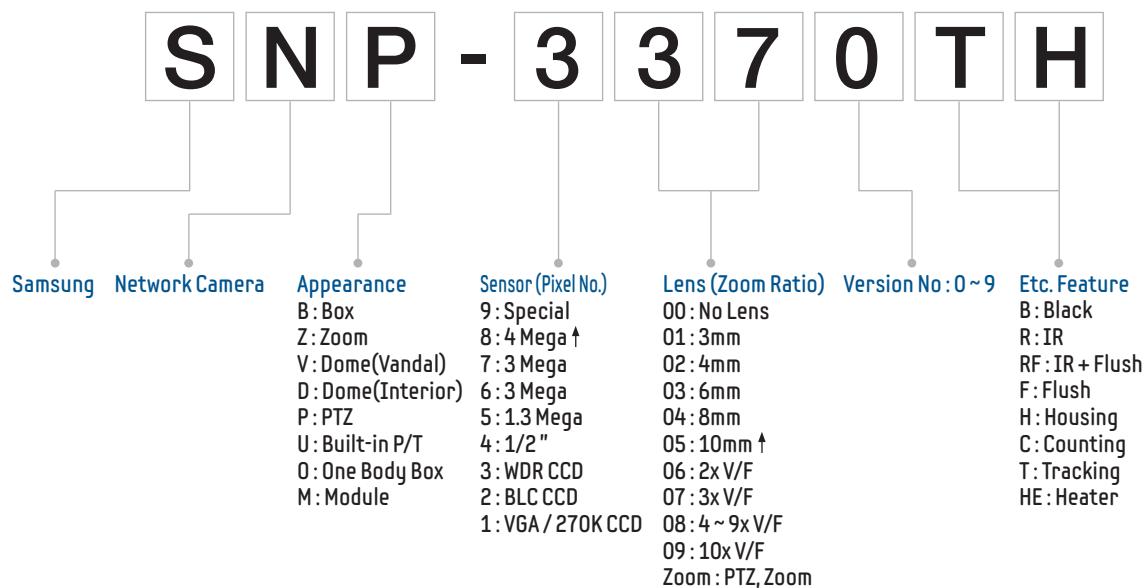


Product Numbering Rule

Analog Camera



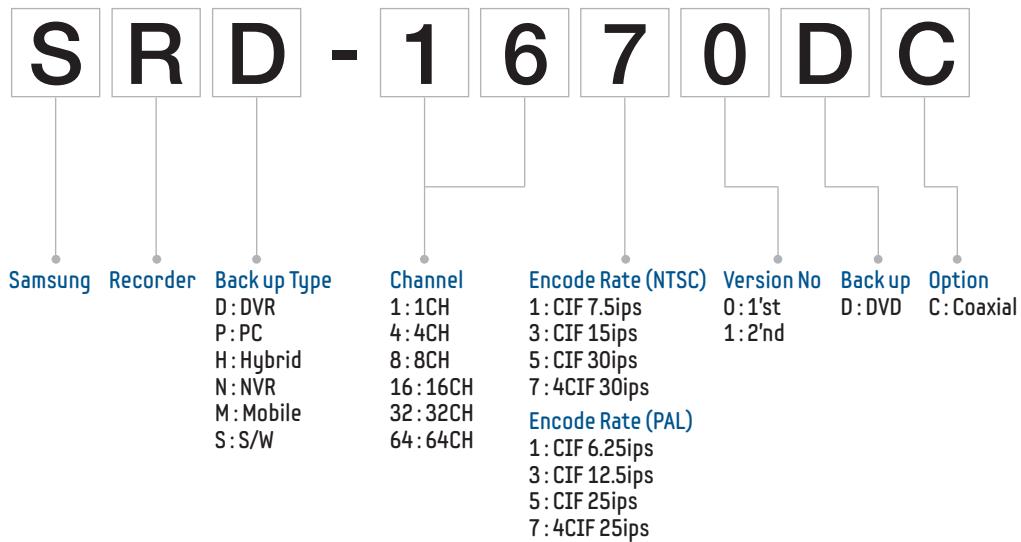
Network Camera





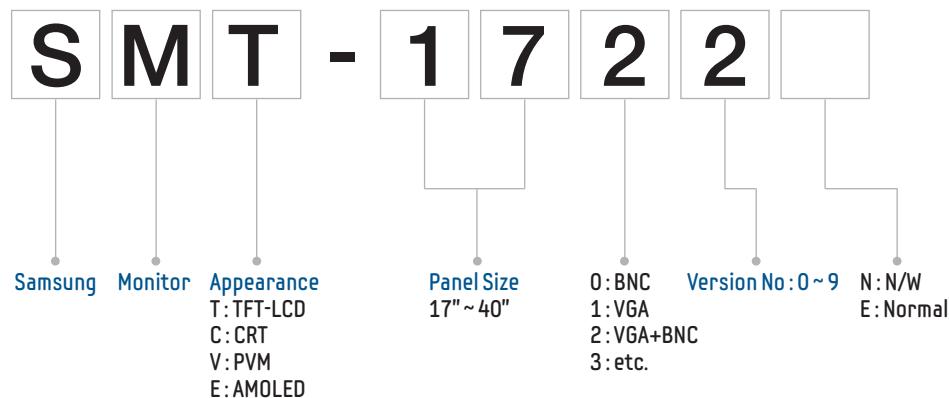
Product Numbering Rule

DVR / NVR



* ips (image per sec)

Monitor





Product Line up



CAMERA

XDR		SCB-4000	16
WDR		SCB-3000/3001	17
XDR		SCB-2001	18
High Resolution		SCB-2000	19
UTP		SUB-2000	20
Built-in Lens		SCO-2370	21
Built-in Lens		SCO-2080	22
IR LEDs		SCO-2080R	23
IR LEDs		SCO-2120R	24
Zoom		SCZ-3430/2430	25
Zoom		SCZ-3250/2250	26
Zoom		SCZ-2370	27
Indoor		SCD-3080	28
Indoor		SCD-2080	29
Indoor		SCD-2010/2030	30
Indoor		SCD-2020/2040/2021	31
UTP		SUD-3080/3080F	32
UTP		SUD-2080/2080F	33
Vandal-Resistant		SCV-2080R	34
Vandal-Resistant		SCV-3120	35
Vandal-Resistant		SCV-3080	36
Vandal-Resistant		SCV-2080	37
Vandal-Resistant		SCV-2120	38
PTZ		SCP-3430H/2430H	39

CAMERA

PTZ		SCP-3430/2430	40
PTZ		SCP-3250H/2250H	41
PTZ		SCP-3250/2250	42
PTZ		SCP-3120	43
PTZ		SCP-3120V	44
PTZ		SCP-3120VH	45
PTZ		SCP-2120	46
PTZ		SCU-2370	47
Thermal		SCB-9051	48
Thermal		SCB-9050	49
LENS			
Zoom		SLA-12240/880	53
V/F		SLA-3580DN/2810D/550DA/612DN/ M2882	54
DVR			
Stand-Alone		SRD-1670/1670D	60
Stand-Alone		SRD-1650/1650D	61
Stand-Alone		SRD-1630/1630D	62
Stand-Alone		SRD-1610/1610D	63
Stand-Alone		SRD-870/870D	64
Stand-Alone		SRD-850/850D	65
Stand-Alone		SRD-830/830D	66
Stand-Alone		SRD-470/470D	67
HDD extension unit		SVS-5E/5R	68



Product Line up



NETWORK

1.3M HD		SNB-5000	75
WDR		SNB-3000	76
XDR		SNB-2000	77
CMOS		SNB-1000	78
Indoor		SND-5080/5080F	79
Indoor		SND-3080/3080F	80
Indoor		SND-1010	81
Indoor		SND-5010	82
Vandal-Resistant		SNV-3120	83
Vandal-Resistant		SNV-5080	84
Vandal-Resistant		SNV-3080	85
PTZ		SNP-3370	86
PTZ		SNP-3301	87
PTZ		SNP-3120	88
PTZ		SNP-3120V	89
PTZ		SNP-3120VH	90
NVR		SRN-6450/3250	91
Encoder		SPE-100	92
S/W		SVM-S1	93
S/W		Net-i viewer	94
S/W		Net-i ware	95

CONTROLLER

PTZ Control		SPC-1010	97
Network Control		SPC-2000	98
PTZ Control		SPC-300	99

MONITOR

TFT-LCD		SMT-4022/3222	103
TFT-LCD		SMT-2231	104

MONITOR

TFT-LCD		SMT-1923/1922	105
TFT-LCD		SMT-1912/1712	106
TFT-LCD		SMT-1723/1722	107
CRT		SMC-215/145	108

ACCESSORY

UTP		SPU-400/400R	110
UTP		SPU-100TR	111
PTZ		SCU-VAC	112
PTZ		STH-380NPO/360NPO/370NPI/370NPE/STB-370NPC	113
PTZ		SHP-4300H/SCX-DF300W	114
PTZ		STB-496PPV/270PWV/25PF/30PF/350PPM	115
PTZ		SCX-300WM/300CM/300HM/300LM	116
PTZ		SBP-43/47	117
PTZ		STB-300PPM/340PCM/270B	118
PTZ		SCX-300PM/300KM	119
PTZ		SADT-101WM/102WM/937WM	120
Vandal-Resistant		STB-319VPW/249VPW/225VW/275VW/250VCW	121
Vandal-Resistant		SCX-301CMW/301WMW	122
Vandal-Resistant		SADT-100PM/110CM	123
Fixed		STH-500/200	124
Fixed		SHB-4200/4200H	125
Fixed		SHB-4300H/4300H1/4300H2	126
Fixed		STB-400/4150V	127
Fixed		SADT-500WM/501WM	128
Fixed		SADT-500CM/501CM/502CM	129

EZ VIEW

	SME-2220	133
	SDE-120	134

Your source for Professional Video Surveillance Systems



CAMERA

Samsung Security Solutions

SAMSUNG



Camera Selection

CAMERA

Type	Model	Image	CCD	Min. Illumination	Lens	Angular Field of View	Horizontal Resolution	D&N	WDR / BLC	S/N Ratio	OSD	MD	Privacy Masking	Power
Box	SCB-4000		1/2"	0.1Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	N/A	N/A	600TVL (Color) 700TVL (B/W)	ICR	XDR / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCB-3000/ SCB-3001		1/3"	0.3Lux/0.1Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	N/A	N/A	600TVL/650TVL (Color) 700TVL (B/W)	ICR	WDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCB-2001		1/3"	0.05Lux@F1.2 (Color) 0.005Lux@F1.2 (B/W)	N/A	N/A	600TVL (Color) 700TVL (B/W)	ICR	XDR / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCB-2000		1/3"	0.05Lux@F1.2 (Color) 0.0001Lux@F1.2 (Color Sens-up)	N/A	N/A	600TVL	Electrical	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC) 12V DC
	SUB-2000		1/3"	0.05Lux@F1.2 (Color) 0.0001Lux@F1.2 (Color Sens-up)	N/A	N/A	600TVL	Electrical	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	24V AC / 12V DC 28V AC
	SCO-2370		1/4"	0.2Lux@F1.67 (Color) 0.02Lux@F1.67 (B/W)	37x (Zoom)	51.54° ~ 4.5°(H) 39.24° ~ 3.38°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCO-2080		1/3"	0.15Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCO-2080R		1/3"	0Lux@F1.2 (LED on) 0.15Lux@F1.2 (Color)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCO-2120R		1/4"	0Lux@F1.67 (LED on) 0.2Lux@F1.67 (Color)	12x (Zoom)	51.54° ~ 4.5°(H) 39.24° ~ 3.38°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCZ-3430/ SCZ-2430		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	43x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
Dome	SCZ-3250/ SCZ-2250		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	25x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCZ-2370		1/4"	0.2Lux@F1.67 (Color) 0.02Lux@F1.67 (B/W)	37x (Zoom)	51.54° ~ 4.5°(H) 39.24° ~ 3.38°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCD-3080		1/3"	0.3Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	3.9x (V/F)	102° ~ 73°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCD-2080		1/3"	0.15Lux@F1.2 (Color) 0.001Lux@F1.2 (B/W)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCD-2010/ SCD-2030		1/3"	0.04Lux@F1.2 (Color Sens-up)	3/6mm (Fixed)	95°(H), 71°(V) 46°(H), 34°(V)	600TVL	N/A	BLC	52dB	N/A	N/A	Yes	12V DC
	SCD-2020/ 2040/2021		1/3"	0.15Lux@F1.2 (Color) 0.0003Lux@F1.2 (Color Sens-up)	3.7/8mm (Fixed)	71°(H), 52°(V) 33°(H), 25°(V)	600TVL	Electrical	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SUD-3080/ SUD-3080F		1/3"	0.3Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	3.9x (V/F)	102° ~ 28°(H) 73° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / HLC / BLC	52dB	Yes	Yes	Yes	24V AC / 12V DC 28V AC
	SUD-2080/ SUD-2080F		1/3"	0.15Lux@F1.2 (Color) 0.001Lux@F1.2 (B/W)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	24V AC / 12V DC 28V AC
	SCV-2080R		1/3"	0Lux@F1.2 (LED on) 0.15Lux@F1.2 (Color)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCV-3120		1/4"	0.7Lux@F1.65 (Color) 0.001Lux@F1.65 (B/W)	12x (Zoom)	51.54° ~ 4.5°(H) 39.24° ~ 3.38°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
PTZ	SCV-3080		1/3"	0.3Lux@F1.2 (Color) 0.01Lux@F1.2 (B/W)	3.9x (V/F)	102° ~ 28°(H) 73° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCV-2080		1/3"	0.15Lux@F1.2 (Color) 0.001Lux@F1.2 (B/W)	3.6x (V/F)	94.4° ~ 28°(H) 69.2° ~ 21°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCV-2120		1/3"	0.2Lux@F1.65 (Color) 0.004Lux@F1.65 (B/W)	12x (Zoom)	51.54° ~ 4.5°(H) 39.24° ~ 3.38°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	52dB	Yes	Yes	Yes	Dual (24V AC / 12V DC)
	SCP-3430H/ SCP-2430H		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	43x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	24V AC
	SCP-3430/ SCP-2430		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	43x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	24V AC
	SCP-3250H/ SCP-2250H		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	25x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	24V AC
	SCP-3250/ SCP-2250		1/4"	0.7Lux/0.2Lux@F1.65 (Color) 0.07Lux/0.02Lux@F1.65 (B/W)	25x (Zoom)	61.22° ~ 1.47°(H) 47.16° ~ 1.1°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	52dB	Yes	Yes	Yes	24V AC
	SCP-3120		1/4"	0.7Lux@F1.65 (Color) 0.07Lux@F1.65 (B/W)	12x (Zoom)	54.44° ~ 4.64°(H) 41.42° ~ 3.52°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	50dB	Yes	Yes	Yes	24V AC
	SCP-3120V		1/4"	0.7Lux@F1.65 (Color) 0.07Lux@F1.65 (B/W)	12x (Zoom)	54.44° ~ 4.64°(H) 41.42° ~ 3.52°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	50dB	Yes	Yes	Yes	24V AC
	SCP-3120VH		1/4"	0.7Lux@F1.65 (Color) 0.07Lux@F1.65 (B/W)	12x (Zoom)	54.44° ~ 4.64°(H) 41.42° ~ 3.52°(V)	600TVL (Color) 700TVL (B/W)	ICR	WDR / BLC	50dB	Yes	Yes	Yes	24V AC
Thermal	SCP-2120		1/4"	0.2Lux@F1.65 (Color) 0.02Lux@F1.65 (B/W)	12x (Zoom)	25.77° ~ 2.55°(H) 19.64° ~ 1.69°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	50dB	Yes	Yes	Yes	24V AC
	SCU-2370		1/4"	0.2Lux@F1.65 (Color) 0.02Lux@F1.65 (B/W)	37x (Zoom)	55.5° ~ 1.59°(H) 42.5° ~ 1.19°(V)	600TVL (Color) 700TVL (B/W)	ICR	SSDR / HLC / BLC	50dB	Yes	Yes	Yes	24V AC
	SCB-9051		N/A	0LUX	F1.4	9.2° ~ 6.9°	N/A	N/A	N/A	N/A	Yes	N/A	N/A	24V AC
	SCB-9050		N/A	0LUX	F1.4	30° ~ 22.8°	N/A	N/A	N/A	N/A	Yes	N/A	N/A	24V AC

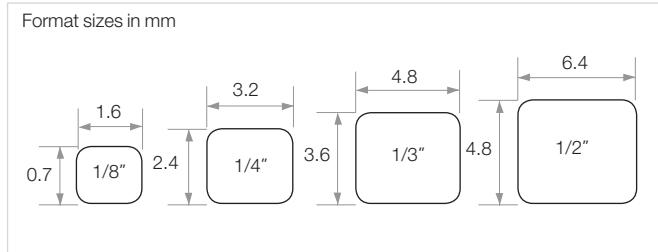


Camera Terms & Features



CCD (Charged Coupled Device)

Charged Coupled Device. This is a solid state semiconductor imaging device often referred to as an integrated circuit, chip or "imager" solid state cameras are sometimes referred to as CCD cameras.



Sensitivity

A camera's ability to reproduce a given scene with a given amount of light. Usually expressed in footcandles or lux. The sensitivity of a CCD camera, broadly speaking, is a measure of its performance in low light conditions.

LIGHTING	LUX LEVEL
Unobstructed sun	100,000
Sun with light cloud	70,000
Sun with heavy cloud	20,000
Home / office lighting	100-1000
Sunrise / sunset	500
Street lighting	1-10
Twilight	4
Full moon	0.2
Quarter moon	0.02
Overcast moon	0.007
Clear night sky	0.001
Average starlight	0.0007
Overcast night sky	0.00005



WDR (Wide Dynamic Range)

Wide Dynamic Range (WDR) technology helps to get detailed information from the dark part of the image without saturation from the bright part. There is no limitation of zone area with the WDR function and the color image is crisper than when using traditional BLC functions. It combines two fields which are high shutter speed exposure in bright areas and low shutter speed exposure in dark areas into one composite image.



Pixel

Short for Picture Element. A pixel is the smallest area of a television picture capable of being delineated by an electrical signal passed through the system. The number of picture elements (pixels) in a complete picture, and their geometric characteristics of vertical height and horizontal width, provide information on the total amount of detail which the raster can display and on the sharpness of the detail, respectively.



Day & Night

Day & Night refers to a function which helps the camera adapt to low lighting conditions. In low light, it switches the camera from color to monochrome automatically, allowing for much greater light sensitivity.

ICR (Infrared Cutfilter Removal)

The IR cut filter is on when the camera is operating as a color camera for precise color reproduction. With ICR, the filter is removed which allows for much greater light sensitivity in monochrome mode.



BLC (Back Light Compensation)

In CCTV applications it is common to have a bright light source behind the subject of interest. A person at an ATM or entering through an outside door are common examples. Without compensation, these subjects would normally appear as dark silhouettes. The aim of back light compensation technology is to allow the camera to find the best picture conditions and automatically give the necessary light level compensation, so that users can obtain good identification of a subject in the foreground when there is a bright light source in the background. BLC works by enhancing specific zones in the picture which usually contains the subject of interest. WDR is a more effective alternative to BLC that does not depend on the subject being in a specific zone.



Camera Terms & Features



HLC (Highlight Compensation Capability)

HLC (Highlight Compensation) is Samsung Techwin's unique BLC technology that detects if any strong spots of light exist and compensates for the area as needed to produce clearer images. Spotlight BLC is especially effective for reading the number-plates of cars in streets or parking lots at night.



HLC Off

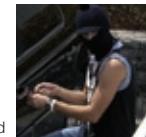


HLC On



MD (Motion Detection)

This is a function where the camera analyzes successive frames of video and can detect movement in the scene. Units that use MD utilize various types of thresholds that can be programmed by the user to prevent or reduce false alarms. If the type or level of motion crosses these thresholds, the unit can automatically react in a way that benefits the system. In cameras with MD, a visible alert message can appear on the screen. In some models, a contact output from the camera can be used to switch a picture to a particular monitor, calling the attention of the operator.



Automatic White Balance

Accurate color reproduction requires that the camera compensate for the color temperature of the light source. Automatic white balance is a feature that the camera uses to do color compensation. For indoor applications incandescent, fluorescent, and quartz lighting all have different color temperatures. Outdoors there is sunlight, mercury vapor, and low pressure sodium lighting, all of which have drastically different color temperatures. In many applications the color temperature can change as lighting conditions change. Samsung Techwin cameras offer white balance functions that can be tailored to provide superior color reproduction over a wide range of color temperature conditions.



Normal



Automatic White Balance



Privacy Masking

This function allows for areas in the picture to be masked so that they cannot be viewed or recorded. The size and position of these masks are programmable. This feature is useful in applications where a camera can see into areas that are not relevant to the security purposes for the camera and the owner does not want to be subject to privacy invasion claims.



Auto Tracking

The advanced auto tracking feature provides high-accuracy detection of moving objects in targeted area by identifying the characteristics of the subject including color, shape and contrast using advanced algorithm. This feature will automatically pan, tilt and optically zoom to identify a subject clearly. This allows the operator easily identify and lock a subject on the screen at a push of a button.



Auto Digital Flip

The auto digital flip feature allows for more convenient way to view an objects that pass directly below the camera. As the camera pans in the vertical direction to follow the object, the digital flip feature will automatically flip the image 180° as the object passes beneath the camera, and continue to follow the subject without delay.



Smart Zoom

The advanced smart zoom feature provides a quick way to automatically zoom into a defined area where motion is detected. This allows the operator to identify a subject that is in a restricted area quickly.



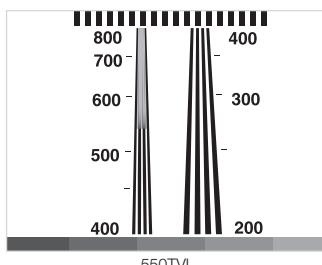
Dual Power

Units with dual power accept either 24V AC or 12V DC power sources and will automatically switch to the appropriate mode upon receiving power.

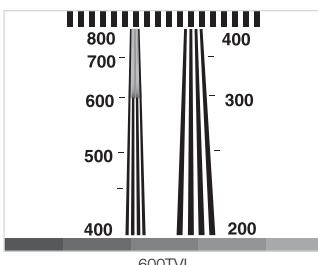


Resolution

The ability of the camera to resolve fine detail can make the difference in obtaining evidence or not. Resolution is measured by a chart with converging lines of higher and higher density. The resolution is the line density where the camera is no longer able to reproduce individual lines. For this reason, resolution is expressed in terms of TV lines (TVL). The higher this number is, the better the picture.

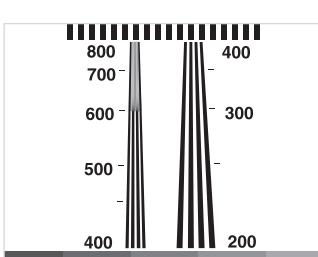
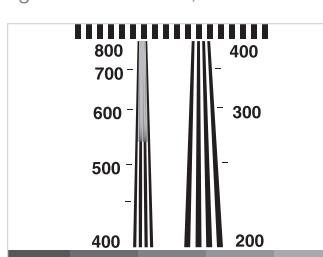


STANDARD TEST CHART



550TVL

600TVL





Core Technologies

SV-V / A1, Advanced DSP



SV-V DSP Chip



A1 DSP Chip

Super High Resolution

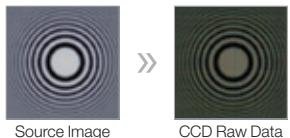
SV-V/A1 camera technology eliminates false colour artifacts (Moiré) by utilising a special optical low pass filter and is able to resolve a horizontal resolution of 600TV lines, by means of 12 Bit A/D serial signal processing coupled with image element enhancement technology. Additionally, the implementation of a 3 line processing algorithm to prevent noise under low illumination applications, directional adaptive filtering and adjustment of aperture gain by luminance level combine to provide a more vivid and clearer image.



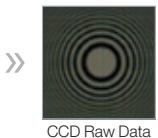
Conventional Camera



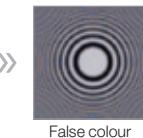
SV-V/A1 Camera



Source Image



CCD Raw Data



False colour Artifacts

Advanced Digital Filter
SV-V/A1 Camera Image

Virtual Progressive Scan (VPS)

SV-V/A1 camera models featuring WDR functions generate images using Double Scan CCD technology and these cameras provide VPS (Virtual Progressive Scan) operation which can utilise either Interlace or Progressive scanning methods. This VPS is unique to Samsung and ensures the edges of moving objects are clearly defined. Applications for Samsung cameras utilising this technology include highway and ANPR projects. When used with LCD monitors offering progressive scan operation, Samsung VPS produces visibly superior images to non-VPS cameras. The problems of the blurred edges resulting from delays in even/odd field image scanning, are eliminated when VPS technology is used with a network product (encoder).



Interlace Transmission (Delayed edge)

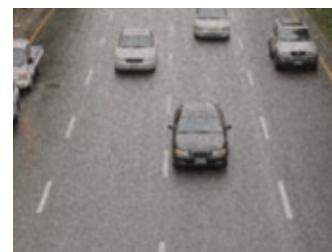


VPS Transmission (Clear edge)

SV V | A1

SSNR (Samsung Super Noise Reduction) / Motion Adaptive DNR

The SSNR/DNR function eliminates noise thus generating a distinct and clear image. SV-V/A1 technology utilises both an adaptive 2D filter reducing noise in the brightness of the image and an adaptive 3D Filter reducing noise caused by movement. These filters are combined with DNle technology which is applied to Samsung CCTV monitors. The result is that SV-V/A1 camera series support SSNR/Motion Adaptive DNR function that removes noise (Fixed Pattern, Random, etc.) and greatly reduces motion blur.



SSNR/DNR Off



SSNR/DNR On

SSDR (Samsung Super Dynamic Range) / eXtended Dynamic Range (XDR)

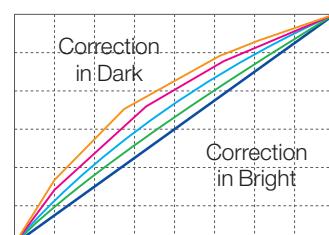
Under strongly backlit or high contrast scenes, cameras generally produce images which reproduce detail in the brighter area of the scene. (fig1) Consequently, detail is often lost in the darker areas of the scene. Samsung SV-V/A1 cameras provide SSDR/XDR technology to increase the level of visible detail in the dark areas, whilst maintaining image clarity and detail in the brighter portions of the image. (fig2)



SSDR/XDR Off



SSDR/XDR On





Core Technologies

SV-V / A1, Advanced DSP

Intelligent Video Content Analysis

The Samsung SV-V/A1 series of cameras, also provide built-in capability for video content analysis. Operational modes include :

- Fixed : Senses objects that appear and remain in a scene for longer than a pre-determined period of time.
- Moved : Detects objects removed from a scene
- Fence : Provides virtual electronic area [Area mode] and directional line [Line mode] and generates an alarm in the event of a breach of the area or a cross of the directional line.
- Tracking : Tracks an object through a scene and generates an alarm in the event of abnormal directional changes.
- Counting : Provides the counting numbers of the objects pre-determined direction. (SV-V)

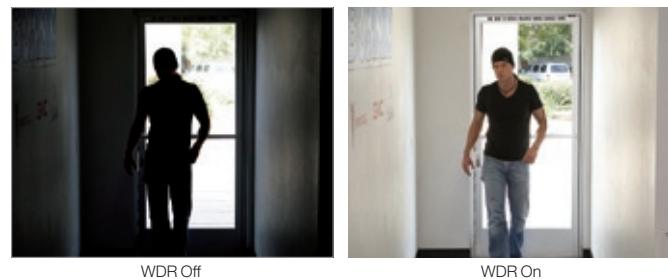
Camera Control Via Coaxial Cable

The Samsung SV-V/A1 series cameras offer camera control via the video coaxial cable. This function provides access to the camera settings menu without connecting the any other control lines to the camera. This technology allows for camera set up (with the exception of lens focus) to be performed remotely, thus simplifying the installation process and offering remote adjustment in real time.



WDR (Wide Dynamic Range)

The SV-V/A1 DSP technology compensates for backlight problems 128 times more effectively than standard BLC, by applying an optimum fusion ratio when combining the high speed shutter used in bright areas and the low speed shutter used in dark areas. It carries out a precise analysis on the picture to get detailed information from the dark areas without any saturation from the bright areas.



DIS (Digital Image Stabilization)

SV-V/A1 cameras have the capability of digitally compensating for camera shake commonly caused by wind or air handling equipment. Removing even minor vibration in the picture results in significant savings in DVR storage space.



Privacy Zone

A "privacy zone" can be set if you desire to block viewing of specific areas in the picture.



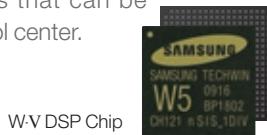


Core Technologies

WV

W-V, the DSP that redefines performance for video security

Samsung Techwin's 5th generation DSP is the engine that brings out the performance of this camera. This unique DSP provides features such as advanced 2D/3D noise filtering and digital image stabilization which work together to reduce storage requirements by as much as 70% over conventional cameras. In addition, the W-V DSP also provides advanced features such as Day & Night and frame integration to enhance low light performance along with features such as motion detection, privacy masking, Highlight Compensation, and image flip. These features are all programmable via onscreen menus that can be remotely set up from the remote control center.



High quality color images of 600TV lines

The W-V camera delivers high quality 600TV lines images utilizing a unique image processing technology found only in Samsung Techwin's 5th generation DSP.



Conventional Camera



W-V Camera

Day & Night function

The W-V utilizes Day & Night control to enhance performance in low lighting conditions. The W-V cameras can deliver outstanding images around the clock in challenging lighting conditions.



Conventional Camera



W-V Camera

SSDR (Samsung Super Dynamic Range)

Featuring SSDR (Samsung Super Dynamic Range), the SCB-2000 automatically increases dark photoelectric signals while retaining bright signals; dark spots in images become more visible for accurate monitoring.



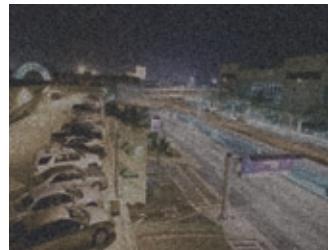
Conventional Camera



W-V Camera

2D/3D noise filter SSNR III for clear low light images

Managing noise is the key to achieving great results in low light. The advanced 2D/3D noise filtering system in the W-V allows it to provide good color in much lower lighting levels. Reducing noise in the picture also reduces the amount of storage space required to record the video on a DVR.



Conventional Camera



W-V Camera

DIS (Digital Image Stabilization)

DIS (Digital Image Stabilization) removes image jitter that is caused by vibrations in the building. This stabilization greatly reduces the amount of hard disk space required to store images on a DVR.

Convenient Multi-language OSD

Advanced features can be easily optimized with the use of the on-screen display menus that are available in six different languages. These menus can be accessed locally at the camera via pushbuttons or remotely from an optional low cost hand-held controller, or from the monitoring location center via RS-485.



Core Technologies

SSNR^{III} (Samsung Super Noise Reduction)

SSNR^{III}

Clearer & Crisper Images in Low Light

SSNR^{III} is a state-of-the-art technology exclusively developed by Samsung Techwin. With this superior technology, a camera can provide much better low light performance by significantly reducing random and fixed noise under low illumination. With more than 30 years of manufacturing experience in this specialized field, Samsung Techwin always takes the initiative in providing customers with superior security systems through constant devotion to technical advancement.

SSNR^{III} OffSSNR^{III} On

Outstanding Performance in Removing Picture Noise

Noise in images is an inevitable phenomenon when cameras are used under unfavorable lighting conditions. When noise becomes significant it obscures the picture. SSNR^{III} technology removes much more noise from the picture than conventional DNR (Digital Noise Reduction) methods. This means that cameras that have SSNR^{III} will produce cleaner pictures and require less DVR storage space than cameras using ordinary DNR.

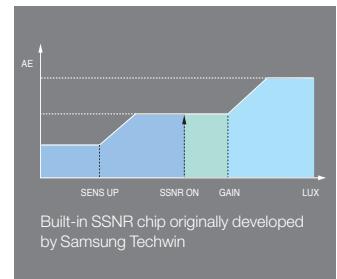
SSNR^{III} OffSSNR^{III} On

Enhanced Sensitivity

Another prominent strength of the SSNR^{III} technology is its enhanced sensitivity in lowlight situations. SSNR^{III}-applied Cameras are superior to other 1/3" CCD cameras in terms of sensitivity. Their ability to resolve a subject in poorly-lit environments has been remarkably improved. Compare it yourself. You will agree that SSNR^{III} equipped cameras redefine what you should expect in low light performance.



Powerful Sensitivity



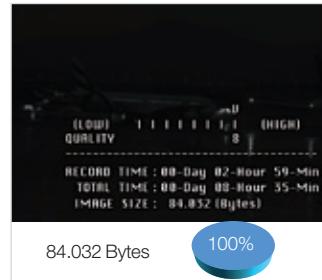
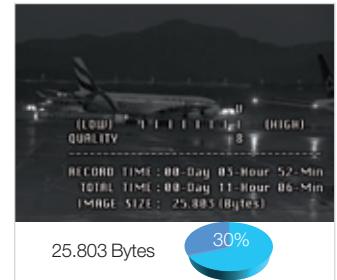
Ghosting-Free Pictures

Along with picture noise, ghosting is one of the critical obstacles to obtaining a sharp and sophisticated image under a tough low-light situation. Ghosting produces a shadowy or weak image in the picture, offset to either the right or to the left of the primary image. The unique SSNR^{III} DSP technology reduces noise without the ghosting that is associated with conventional DNR technologies.

SSNR^{III} OffSSNR^{III} On

Substantial Disk-Saving Effect

The SSNR^{III} technology also has an excellent disk-saving effect. The recorded image size of an SSNR^{III}-equipped camera is considerably smaller than that of ordinary cameras. This is because the DVR interprets noise as additional picture detail and cannot compress it effectively. Tests have shown that SSNR^{III} technology cuts down the file size recorded on a DVR by 70 percent when using an MPEG format DVR and 40 percent with a JPEG format DVR.

SSNR^{III} OffSSNR^{III} On

SCB-4000

1/2" High Resolution Low Light Camera

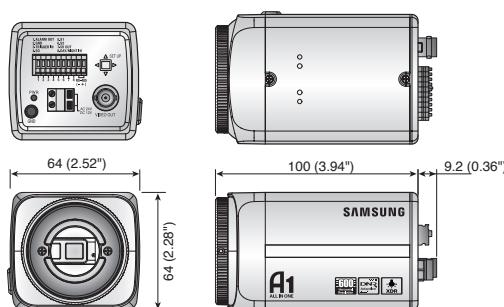


Features

- 1/2" Ex-view HAD color CCD
- Motion adaptive digital noise reduction (3D+2D)
- eXtended Dynamic Range (XDR)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.1Lux@F1.2 (Color)
0.01Lux@F1.2 (B/W)
0.0002Lux@F1.2 (Color sens-up)
- Internal / Linelock (Phase control) function
- True Day & Night (ICR) • ALC (Video/DC) / ELC
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed / Fence / Area / Tracking)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCB-4000N	SCB-4000P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 4.0W	
VIDEO		
Imaging Device	1/2" Ex-view HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.1Lux (50IRE@F1.2), 0.0002Lux (Sens-up, 512x) B/W : 0.01Lux (50IRE@F1.2)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Danish, Turkish
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Digital Noise Reduction	On / Off	
Backlight Compensation	BLC (On / Off)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
Intelligent Video	On / Off (Moved / Fixed / Fence / Area / Tracking)	
PIP	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	64 x 58 x 109.2mm (2.52" x 2.28" x 4.3")	
Weight	305g (0.67 lb)	
Lens Mount	C / CS	
Certifications	FCC (Class A), UL (External power supply)	CE (Class A)

SCB-3000/3001

1/3" Super High Resolution WDR Camera

CAMERA

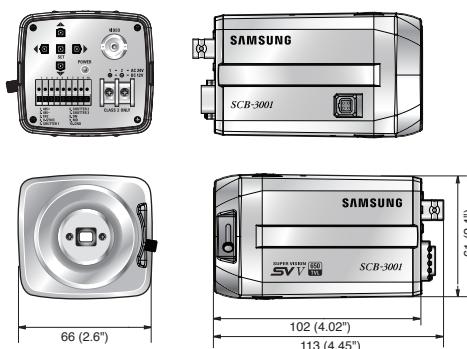


Features

- 1/3" Vertical double density color CCD
- Built-in SV-V, the latest generation of SV DSP engine
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- SSNR III, Upgraded 2D/3D noise reduction technology
- Excellent high resolution of 650TV lines (Color), 700TV lines (B/W) : SCB-3001
- High resolution of 600TV lines (Color), 700TV lines (B/W) : SCB-3000
- Min. illumination of 0.3Lux/0.1Lux@F1.2 (Color) : SCB-3000/3001
0.01Lux@F1.2 (B/W)
0.0006Lux/0.0002Lux@F1.2 (Color sens-up) : SCB-3000/3001
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- Privacy masking with 12 programmable zones (Polygonal)
- Intelligent video analysis
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCB-3000N	SCB-3001N	SCB-3000P	SCB-3001P
ELECTRICAL				
Input Voltage	Dual (12V DC / 24V AC)			
Power Consumption	Max. 4.0W			
VIDEO				
Imaging Device	1/3" Vertical double density interline CCD			
Total Pixels	811(H) x 508(V)	1028(H) x 508(V)	795(H) x 596(V)	1028(H) x 596(V)
Effective Pixels	768(H) x 494(V)	976(H) x 494(V)	752(H) x 582(V)	976(H) x 582(V)
Scanning System	2:1 Interlace / VPS			
Synchronization	Internal / Line lock / Extern			
Frequency	H: 15.734KHz / V: 59.94Hz	H: 15.625KHz / V: 50Hz		
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.) : SCB-3000	Color : 650TV lines (Min.) / B/W : 700TV lines (Min.) : SCB-3001		
Min. Illumination	Color : 0.3Lux/0.1Lux (50IRE@F1.2), 0.0006Lux/0.0002Lux (Sens-up, 512x) : SCB-3000/3001 B/W : 0.01Lux (50IRE@F1.2), 0.00002Lux (Sens-up, 512x)			
S / N (Y signal)	52dB (AGC off, Weight on)			
Video Output	CVBS : 1.0 Vp-p / 75Ω composite			
OPERATIONAL				
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese		
Camera Title	On / Off			
Day & Night	Auto (ICR) / Extern / Color / B/W			
Backlight Compensation	Off / User BLC / HLC / SSDR / WDR			
Wide Dynamic Range	128x	160x		
Digital Image Stabilization	On / Off			
Privacy Masking	On / Off (12 programmable zones)			
2D+3D Noise Filter (SSNR III)	On / Off			
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)			
Gain Control	Low / High / Off			
White Balance	AWC / Manual / Outdoor / Indoor / ATW (1,700K ~ 11,000K)			
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec		
Digital Zoom	On / Off (1x ~ 16x)			
Sharpness	On / Off (Level adjustable)			
Reverse	Off / H-REV / V-REV / HV-REV			
Communication	RS-485, Coaxial control			
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic			
ENVIRONMENTAL				
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH			
MECHANICAL				
Dimension (WxHxD)	66 x 61 x 102mm (2.6" x 2.4" x 4.02")			
Weight	310g (0.68 lb)			
Lens Mount	C / CS			
Certifications	FCC (Class A), UL (External power supply)	CE (Class A), UL (External power supply)		

SCB-2001

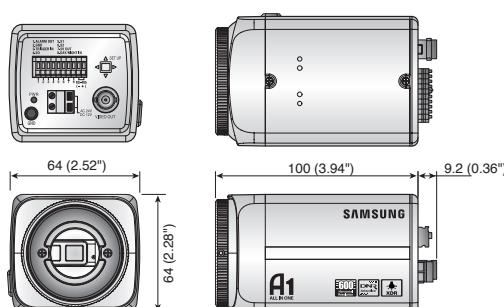
1/3" High Resolution Low Light Camera



Features

- 1/3" Super HAD color CCD
- Motion adaptive digital noise reduction (3D+2D)
- eXtended Dynamic Range (XDR)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.05Lux@F1.2 (Color)
0.005Lux@F1.2 (B/W)
0.0001Lux@F1.2 (Color sens-up)
- Internal / Linelock (Phase control) function
- True Day & Night (ICR) • ALC (Video/DC) / ELC
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed / Fence / Area / Tracking)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions



Technical Specifications

	SCB-2001N	SCB-2001P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 4.0W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.05Lux (50IRE@F1.2), 0.0001Lux (Sens-up, 512x) B/W : 0.005Lux (50IRE@F1.2)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Danish, Turkish
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Digital Noise Reduction	On / Off	
Backlight Compensation	BLC (On / Off)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
Intelligent Video	On / Off (Moved / Fixed / Fence / Area / Tracking)	
PIP	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH	
Storage Temperature / Humidity	-20°C ~ +60°C (-4°F ~ +140°F) / 30% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	64 x 58 x 109.2mm (2.52" x 2.28" x 4.3")	
Weight	305g (0.67 lb)	
Lens Mount	C / CS	
LED Indicator	Built-in	
Certifications	FCC (Class A), UL (External power supply)	CE (Class A)

SCB-2000

1/3" High Resolution Camera

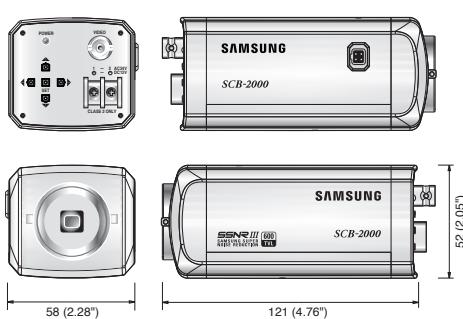


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night capability for 24/7 operation
- High resolution of 600TV lines
- Min. illumination of 0.05Lux@F1.2 (Color)
0.0001Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage: 12V DC / 24V AC (SCB-2000N/P)
- Voltage: 12V DC (SCB-2000ND/PD)

Dimensions

Unit : mm (inch)



Technical Specifications

	SCB-2000N	SCB-2000ND	SCB-2000P	SCB-2000PD
ELECTRICAL				
Input Voltage	Dual (12V DC / 24VAC)	12V DC	Dual (12V DC / 24VAC)	12V DC
Power Consumption	Max. 3.5W	Max. 2.5W	Max. 3.5W	Max. 2.5W
VIDEO				
Imaging Device	1/3" Super HAD CCD			
Total Pixels	811(H) x 508(V)		795(H) x 596(V)	
Effective Pixels	768(H) x 494(V)		752(H) x 582(V)	
Scanning System	2:1 Interlace			
Synchronization	Internal / Line lock	Internal	Internal / Line lock	Internal
Frequency	H:15.734KHz / V: 59.94Hz		H:15.625KHz / V: 50Hz	
Horizontal Resolution	600TV lines (Min.)			
Min. Illumination	Color : 0.05Lux (50 IRE@F1.2), 0.0001Lux (Sens-up, 512x)			
S / N (Y signal)	52dB			
Video Output	CVBS : 1.0Vp-p / 75Ω composite			
OPERATIONAL				
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean		English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese	
Camera Title	Off / On (Displayed 15 characters)			
Day & Night	Auto (Electrical) / Color / B/W			
SSDR	On / Off (Level adjustable)			
Backlight Compensation	BLC / HLC / Off			
Motion Detection	On / Off (8 programmable zones)			
Digital Zoom	On / Off (1x ~ 16x)			
Digital Image Stabilization	On / Off			
Privacy Masking	On / Off (12 programmable zones)			
2D+3D Noise Filter (SSNR III)	On / Off			
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)			
Gain Control	Low / High / Off			
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700°K ~ 11,000°K)			
Electronic Shutter Speed	1/60 ~ 1/120,000sec		1/50 ~ 1/120,000sec	
Sharpness	On / Off (Level adjustable)			
Flip / Mirror	On / Off			
Communication	Coaxial control			
ENVIRONMENTAL				
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH			
MECHANICAL				
Dimension (WxHxD)	58 x 52 x 121mm (2.28" x 2.05" x 4.76")			
Weight	310g (0.68 lb)	290g (0.64 lb)	310g (0.68 lb)	290g (0.64 lb)
Lens Mount	C / CS			
Certifications	FCC (Class A), UL/cUL listed	FCC (Class A)	CE (Class A)	

SUB-2000

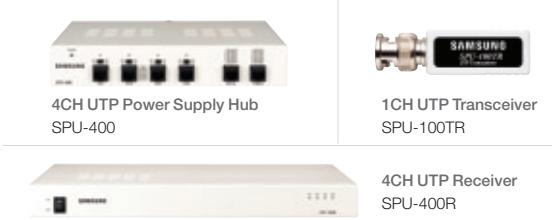
1/3" High Resolution UTP Camera



Features

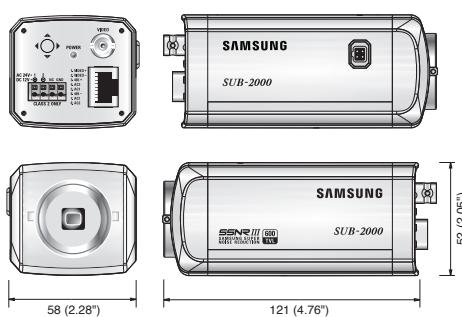
- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night capability for 24/7 operation
- High resolution of 600TV lines
- Min. illumination of 0.05Lux@F1.2 (Color)
0.0001Lux@F1.2 (Color sens-up)
- Built in UTP transmitter
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range) • HLC (Highlight Compensation)
- DIS (Digital Image Stabilization) • Motion detection
- Coaxial & RS-485 control • 512x sens-up support
- Multi-language OSD • S/N ratio of 52dB
- Voltage : 12V DC / 24V AC / 28V AC

UTP Kit



Dimensions

Unit : mm (inch)



Technical Specifications

	SUB-2000N	SUB-2000P
ELECTRICAL		
Input Voltage	12V DC / 24V AC / 28V AC	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H: 15.734KHz / V: 59.94Hz	H: 15.625KHz / V: 50Hz
Horizontal Resolution	600TV lines (Min.)	
Min. Illumination	Color : 0.05Lux (50IRE@F1.2), 0.0001Lux (Sens-up, 512x)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
UTP Output	Built-in UTP TX [Maximum transmission length 900m (3,000ft)] : Balanced differential signal 100Ω	
Compatibilities	NVT, Nitec	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	Off / On (Displayed 15 characters)	
Day & Night	Auto (Electrical) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / High / Off	
White Balance	AWB / Outdoor / Indoor / Manual / AWC (1,700K ~ 11,000K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Shutter Mode	Fixed, ESC, Manual, A.FLK	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Panasonic, Honeywell, Vicon	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	58 x 52 x 121mm (2.28" x 2.05" x 4.76")	
Weight	290g (0.64 lb)	
Lens Mount	C / CS	
Certifications	FCC (Class A), UL (External power supply)	CE (Class A), UL (External power supply)



SCO-2370

1/4" 37x High Resolution Camera

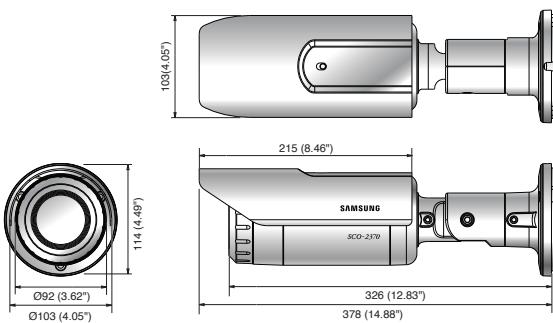


Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 37x optical zoom (3.5 ~ 129.5mm) and 16x digital zoom
- SSNR III, Upgraded 2D/3D noise reduction technology
- True Day & Night (ICR)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.2Lux@F1.67 (Color)
0.02Lux@F1.67 (B/W)
0.0004Lux@F1.67 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66), Sunshield
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCO-2370N	SCO-2370P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 28W (Heater on, 24V AC)	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. illumination	Color : 0.2Lux (50 IRE@F1.67), 0.0004Lux (Sens-up, 512x) B/W : 0.02Lux (50 IRE@F1.67)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p, 75Ω composite	
LENS		
Zoom Ratio	37x (Optical), 16x (Digital)	
Focal Length	3.5 ~ 129.5mm (F1.67 ~ 1.88)	
Max. Aperture Ratio	1 : 1.6(Wide) ~ 3.9(Tele)	
Min. Object Distance	1.5m (4.92ft)	
Angular Field of View	H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)	
Focus	Auto / Manual / One push	
Iris Control	Auto / Manual	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	AWC, Manual, Indoor, Outdoor, ATW (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	Fixed (1/60 / Flickerless)	Fixed (1/50 / Flickerless)
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	103 x 114 x 378mm (4.05" x 4.49" x 14.88")	
Weight	1.95Kg (4.31 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A)	CE (Class A)

SCO-2080

1/3" High Resolution Varifocal Lens Camera

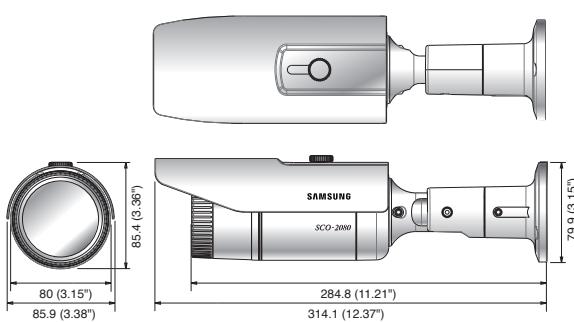


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Quick & easy to install, Stylish design
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines
- Min. illumination of 0.15Lux@F1.2 (Color)
0.01Lux@F1.2 (B/W)
0.0003Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66), Sunshield
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCO-2080N	SCO-2080P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 2.7W / 3.8W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. illumination	Color : 0.15Lux (50 IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0.01Lux (50 IRE@F1.2)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
Focus	Manual	
Iris Control	Auto	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	Off / On (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	On / Off (Selectable 2x ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	85.9 x 85.4 x 314.1mm (3.38" x 3.36" x 12.37")	
Weight	1Kg (2.2 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A) / CE (Class A)	

SCO-2080R

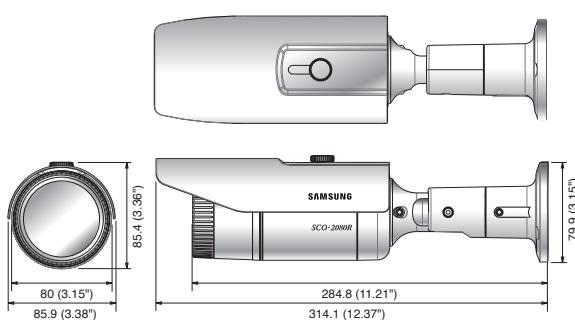
1/3" High Resolution Varifocal Lens IR LED Camera



Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- Built-in high-performance IR LEDs
- SSNRIII, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0Lux@F1.2 (LED on)
 - 0.15Lux@F1.2 (Color)
 - 0.0003Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66), Sunshield
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions



Technical Specifications

	SCO-2080RN	SCO-2080RP
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 6.8W / 6.5W (LED On)	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0Lux (LED on)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p, 75Ω composite	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
Focus	Manual	
Iris Control	Auto	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNRIII)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	85.9 x 85.4 x 314.1mm (3.38" x 3.36" x 12.37")	
Weight	1Kg (2.2 lb)	
IR LED	32ea	
IR Distance	50m (164ft)	
Ingress Protection	IP66	
Certifications	FCC (Class A)	CE (Class A)

SCO-2120R

1/4" 12x High Resolution IR LED Camera

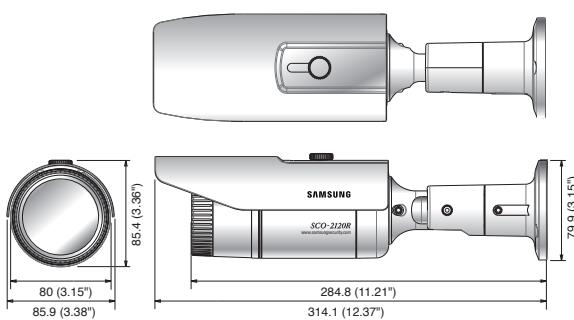


Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 12x optical zoom (3.9 ~ 46mm) and 16x digital zoom
- Built-in high-performance IR LEDs
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0Lux@F1.67 (LED on)
0.2Lux@F1.67 (Color)
0.0004Lux@F1.67 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66), Sunshield
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCO-2120RN	SCO-2120RP
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 6.8W / 6.5W (LED on)	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. illumination	Color : 0.2Lux (50IRE@F1.67), 0.0004Lux (Sens-up, 512x) B/W : 0Lux (LED on)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p, 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.9 ~ 46mm (F1.67 ~ 1.88)	
Max. Aperture Ratio	1: 1.67(Wide) ~ 1.88(Tele)	
Min. Object Distance	1.8m (5.91ft)	
Angular Field of View	H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)	
Focus	Auto / Manual / One push	
Iris Control	Auto / Manual	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / Medium / High / Manual / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700K ~ 11,000K)	
Electronic Shutter Speed	ESC / FLK / Manual (1/60 ~ 1/120,000sec, 2x ~ 512x sec.)	ESC / FLK / Manual (1/50 ~ 1/120,000sec, 2x ~ 512x sec.)
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	85.9 x 85.4 x 314.1mm (3.38" x 3.36" x 12.37")	
Weight	1.2Kg (2.65 lb)	
IR LED	31ea	
IR Distance	70m (230ft)	
Ingress Protection	IP66	
Certifications	FCC (Class A)	CE (Class A)

A1

SAMSUNG

SCZ-3430/2430

1/4" 43x High Resolution WDR Zoom Camera

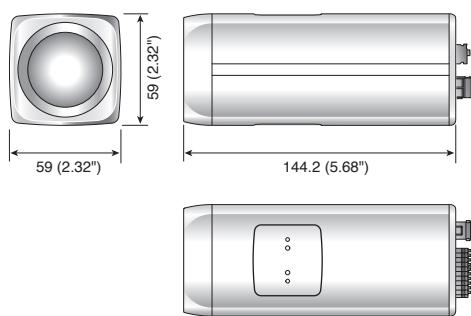


Features

- 1/4" Ex-view HAD PS color CCD : SCZ-3430
- 1/4" Super HAD color CCD : SCZ-2430
- Powerful 43x optical zoom (3.2 ~ 138.5mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCZ-3430
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCZ-3430 / 0.2Lux@F1.65 : SCZ-2430 (Color)
0.07Lux@F1.65 : SCZ-3430 / 0.02Lux@F1.65 : SCZ-2430 (B/W)
0.001Lux@F1.65 : SCZ-3430 / 0.0004Lux@F1.65 : SCZ-2430 (Color sens-up)
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCZ-3430N/2430N	SCZ-3430P/2430P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 5.6W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCZ-3430 / 1/4" Super HAD CCD : SCZ-2430	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCZ-3430 : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCZ-2430 : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	43x (Optical), 16x (Digital)	
Focal Length	3.2 ~ 138.5mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)	
Focus	Auto / Manual / One AF	
Lens Drive Type	DC Auto Iris	
Lens Mount	Board-in type	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Danish, Turkish
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCZ-3430	160x : SCZ-3430
Digital Noise Reduction	On / Off	
Backlight Compensation	BLC (On / Off) / WDR (SCZ-3430)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90%	
MECHANICAL		
Dimension (WxHxD)	59 x 59 x 144.2mm (2.32" x 2.32" x 5.68")	
Weight	508g (1.12 lb)	
LED Indicator	Built-in	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

SCZ-3250/2250

1/4" 25x High Resolution WDR Zoom Camera

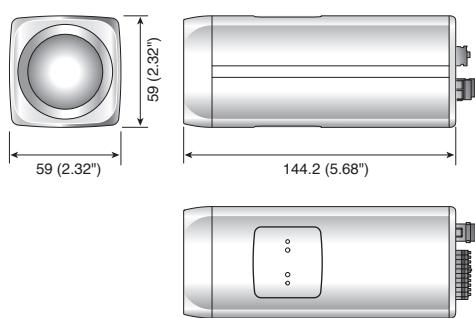


Features

- 1/4" Ex-view HAD PS color CCD : SCZ-3250
- 1/4" Super HAD color CCD : SCZ-2250
- Powerful 25x optical zoom (3.6 ~ 91mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCZ-3250
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCZ-3250 / 0.2Lux@F1.65 : SCZ-2250 (Color)
0.07Lux@F1.65 : SCZ-3250 / 0.02Lux@F1.65 : SCZ-2250 (B/W)
0.001Lux@F1.65 : SCZ-3250 / 0.0004Lux@F1.65 : SCZ-2250 (Color sens-up)
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCZ-3250N/2250N	SCZ-3250P/2250P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 5.6W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCZ-3430 / 1/4" Super HAD CCD : SCZ-2430	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCZ-3250 : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCZ-2250 : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	25x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 91mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)	
Focus	Auto / Manual / One AF	
Lens Drive Type	DC Auto Iris	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Danish, Turkish
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCZ-3250	160x : SCZ-3250
Digital Noise Reduction	On / Off	
Backlight Compensation	BLC (On / Off) / WDR (SCZ-3250)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90%	
MECHANICAL		
Dimension (WxHxD)	59 x 59 x 144.2mm (2.32" x 2.32" x 5.68")	
Weight	508g (1.12 lb)	
LED Indicator	Built-in	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

SCZ-2370

1/4" 37x High Resolution Zoom Camera

CAMERA

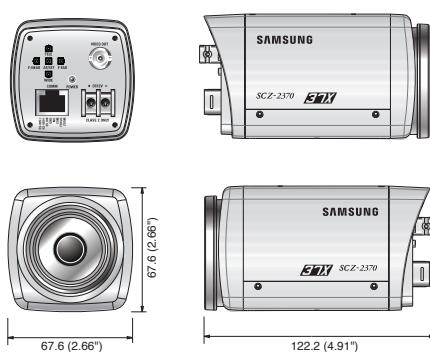


Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 37x optical zoom (3.5 ~ 129.5mm) and 16x digital zoom
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.2Lux@F1.67 (Color)
0.02Lux@F1.67 (B/W)
0.0004Lux@F1.67 (Color sens-up)
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCZ-2370N	SCZ-2370P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24V AC)	
Power Consumption	Max. 4.8W (Zoom, Focus, Day & Night motor operating at 12V DC / 24V AC)	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. illumination	Color : 0.2Lux (50IRE@F1.67), 0.0004Lux (Sens-up, 512x) B/W : 0.02Lux (50IRE@F1.67)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p, 75Ω composite	
LENS		
Zoom Ratio	37x (Optical), 16x (Digital)	
Focal Length	3.5 ~ 129.5mm (F1.67 ~ 1.88)	
Max. Aperture Ratio	1:1.6(Wide) ~ 3.9(Tele)	
Min. Object Distance	1.5m (4.92ft)	
Angular Field of View	H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)	
Focus	Auto / Manual / One push	
Zoom Movement Speed	2.8sec	
Iris Control	Auto / Manual	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / Medium / High / Manual / Off	
White Balance	AWC, Manual, Indoor, Outdoor, ATW (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	ESC / FLK / Manual (1/60 ~ 1/120,000sec, 2x ~ 512x sec.)	ESC / FLK / Manual (1/50 ~ 1/120,000sec, 2x ~ 512x sec.)
Sharpness	On / Off (Level adjustable)	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	DC type : 67.6 x 67.6 x 122.2mm (2.66" x 2.66" x 4.91") Dual type : 67.6 x 67.6 x 147.7mm (2.66" x 2.66" x 5.81")	
Weight	DC type : 415g (0.91 lb) / Dual type : 520g (1.15 lb)	
Option	Remote controller	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed



SCD-3080

1/3" High Resolution WDR Varifocal Dome Camera

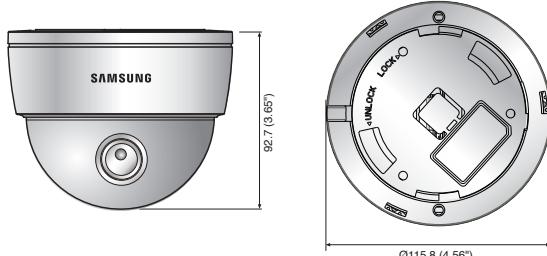


Features

- 1/3" Vertical double density color CCD
- Built-in SV-V, the latest generation of SV DSP engine
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- Built-in 3.9x (2.8 ~ 11mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.3Lux@F1.2 (Color)
0.01Lux@F1.2 (B/W)
0.0006Lux@F1.2 (Color sens-up)
- Privacy masking with polygonal type
- Intelligent video analytics
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCD-3080N	SCD-3080P
ELECTRICAL		
Input Voltage	Dual (12V DC/ 24V AC)	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/3" Vertical double density interline CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.3Lux (50IRE@F1.2), 0.0006Lux (Sens-up, 512x) B/W : 0.01Lux (50IRE@F1.2), 0.00002Lux (Sens-up 512x)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.9x (Manual)	
Focal Length	2.8 ~ 11mm (F1.2)	
Max. Aperture Ratio	1:1.2(Wide) ~ 2.8(Tele)	
Angular Field of View	H : 102°(Wide) ~ 73°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 352°	
Tilt Range	0° ~ 73°	
Rotate Range	0° ~ 348°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Backlight Compensation	WDR / User BLC / HLC / SSDR / Off	
Wide Dynamic Range	128x	160x
Digital Image Stabilization	On / Off	
Intelligent Video Analytics	Detection / Tracking / Fixed / Moved / Alarm out	
Privacy Masking	On / Off (12 programmable zones, polygonal type)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / High / Off	
White Balance	AWC / Manual / Indoor / Outdoor / ATW (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Reverse	Off / H-REV / V-REV / HV-REV	
Communication	Coaxial control	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxH)	Ø115.8 x 92.7mm (Ø4.56" x 3.65")	
Weight	365g (0.81 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCD-2080

1/3" High Resolution Varifocal Dome Camera

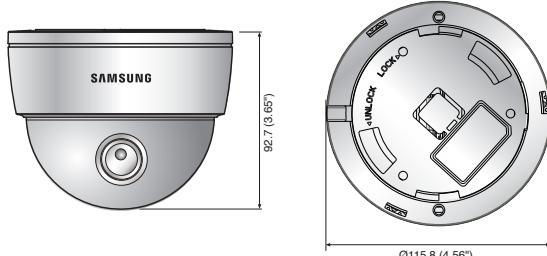


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.15Lux@F1.2 (Color)
0.001Lux@F1.2 (B/W)
0.0003Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCD-2080N	SCD-2080P
ELECTRICAL		
Input Voltage	Dual (12V DC/ 24V AC)	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0.001Lux (50IRE@F1.2)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1:1.2(Wide) ~ 2.8(Tele)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 352°	
Tilt Range	0° ~ 73°	
Rotate Range	0° ~ 348°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / High / Off	
White Balance	AWC / Manual / Indoor / Outdoor / ATW (1,700°K ~ 11,000°K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Flip / Mirror	On / Off	
Communication	Coaxial control	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø115.8 x 92.7mm (Ø4.56" x 3.65")	
Weight	345g (0.76 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCD-2010/2030

1/3" High Resolution Mini Dome Camera

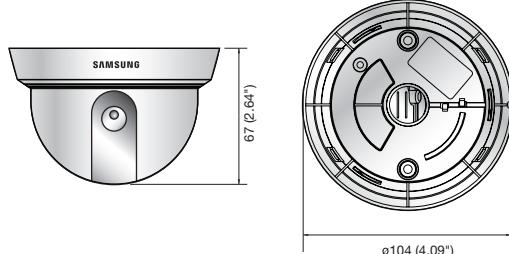


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in auto iris fixed lens : 3mm (SCD-2010)
6mm (SCD-2030)
- SSNRIII, Upgraded 2D/3D noise reduction technology
- High resolution of 600TV lines
- Min. illumination of 0.04Lux@F1.2 (Color, Sens-up)
- Compact, light weight and stylish design
- Coaxial control
- S/N ratio of 52dB
- Voltage : 12V DC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCD-2010N/2030N	SCD-2010P/2030P
ELECTRICAL		
Input Voltage	12V DC	
Power Consumption	Max. 1.8W	
Video		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal	
Frequency	H:15.734KHz / V:59.94Hz	H:15.625KHz / V:50Hz
Horizontal Resolution	600TV lines (Min.)	
Min. Illumination	Color : 0.04Lux (50IRE@F1.2, Sens-up)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	Fixed	
Focal Length	3mm : SCD-2010 / 6mm : SCD-2030	
Max. Aperture Ratio	F2.0 : SCD-2010 / F2.5 : SCD-2030	
Min. Object Distance	0.4m (1.31ft)	
Angular Field of View	H: 95°, V: 71° : SCD-2010 / H: 46°, V: 34° : SCD-2030	
PAN / TILT		
Pan Range	0° ~ 352°	
Tilt Range	0° ~ 75°	
OPERATIONAL		
Backlight Compensation	Off (Coaxial osd : BLC / HLC / Off)	
2D+3D Noise Filter (SSNRIII)	Off (Coaxial osd : On / Off (Level adjustable))	
Sens-up (Frame Integration)	Auto (Coaxial osd : Auto / Off (Selectable 2x ~ 512x))	
Gain Control	High (Coaxial osd : Low / High / Off)	
White Balance	ATW (Coaxial osd : AWC / Manual / Indoor / Outdoor / ATW (1,700K ~ 11,000K))	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Communication	Coaxial control	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxH)	Ø104 x 67mm (Ø4.09" x 2.64")	
Weight	180g (0.4 lb)	
Certifications	FCC (Class A)	CE (Class A)

SCD-2020/2040/2021

1/3" High Resolution Dome Camera

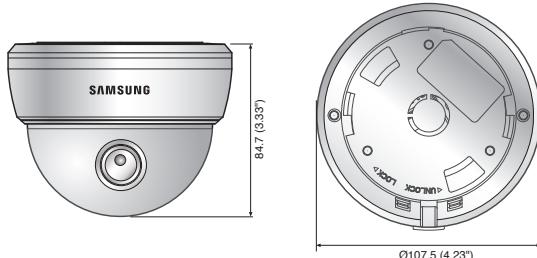


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in auto iris fixed lens : 3.7mm (SCD-2020)
8mm (SCD-2040)
3.7, 8mm (SCD-2021)
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night capability for 24/7 operation
- High resolution of 600TV lines
- Min. illumination of 0.15Lux@F1.2 (Color)
0.0003Lux@F1.2 (Color sens-up)
- Compact, stylish design for various indoor applications
- Privacy masking with 12 programmable zones
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCD-2020N/2040N/2021N	SCD-2020P/2040P/2021P
ELECTRICAL		
Input Voltage	Dual (12V DC/ 24V AC)	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2:1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H:15.734KHz / V: 59.94Hz	H:15.625KHz / V: 50Hz
Horizontal Resolution	600TV lines (Min.)	
Min. Illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512x)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	Fixed	
Focal Length	3.7mm : SCD-2020 / 8mm : SCD-2040 / 3.7, 8mm : SCD-2021	
Max. Aperture Ratio	F2.0	
Min. Object Distance	0.4m (1.31ft)	
Angular Field of View	H:71° / V: 52°	H: 33° / V: 25°
PAN / TILT / ROTATE		
Pan Range	0° ~ 352°	
Tilt Range	0° ~ 75°	
Rotate Range	0° ~ 348°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (Electrical) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700K ~ 11,000K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Communication	Coaxial Control	
Flip / Mirror	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø107.6 x 83.7mm (Ø4.24" x 3.3")	
Weight	285g (0.63 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SUD-3080/3080F

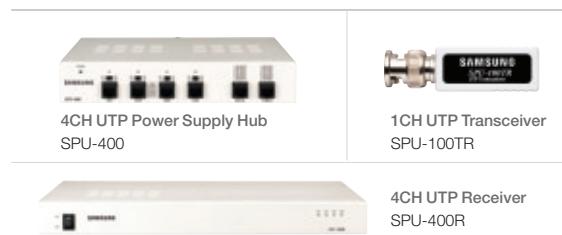
1/3" High Resolution WDR UTP Dome Camera



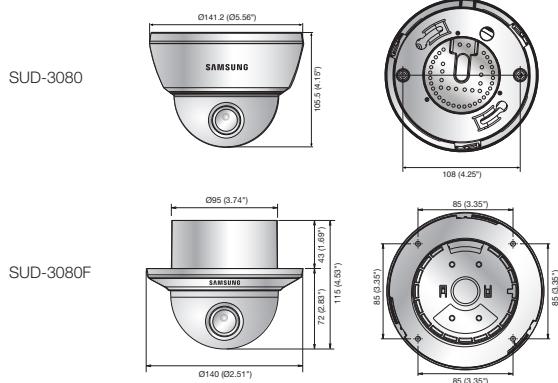
Features

- 1/3" Vertical double density color CCD
- Built-in SV-V, the latest generation of SV DSP engine
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- Built-in 3.9x (2.8 ~ 11mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.3Lux@F1.2 (Color)
0.01Lux@F1.2 (B/W)
0.0006Lux@F1.2 (Color sens-up)
- Built in UTP transmitter • Intelligent video analysis
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range) • HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Coaxial & RS-485 control • 512x sens-up support
- Multi-language OSD • S/N ratio of 52dB
- Voltage : 12V DC / 24V AC / 28V AC

UTP Kit



Dimensions



Technical Specifications

	SUD-3080N/3080FN	SUD-3080P/3080FP
ELECTRICAL		
Input Voltage	12V DC / 24V AC / 28V AC	
Power Consumption	Max. 4.0W	
VIDEO		
Imaging Device	1/3" Vertical double density interline CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines / B/W : 700TV lines	
Min. Illumination	Color : 0.3Lux (50 IRE@F1.2), 0.0006Lux (Sens-up, 512x) B/W : 0.01Lux (50 IRE@F1.2), 0.00002Lux (Sens-up 512x)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
UTP Output	Built-in UTP TX [Maximum transmission length 900m (3,000ft) : Balanced differential signal 100Ω]	
Compatibilities	NVT, Nitec	
LENS		
Zoom Ratio	3.9x (Manual)	
Focal Length	2.8 ~ 11mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 102°(Wide) ~ 28°(Tele) / V : 73°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 340°	
Tilt Range	0° ~ 146°	
Rotate Range	0° ~ 340°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	Off / On (Displayed 15 characters)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Backlight Compensation	WDR / User BLC / HLC / SSDR / Off	
Wide Dynamic Range	128x	160x
VPS (Virtual Progressive Scan)	On / Off	
Intelligent Video Analytics	Detection / Tracking / Fixed / Moved / Alarm out	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700K ~ 11,000K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Shutter Mode	Fixed, ESC, Manual, A.FLK	
Reverse	Off / H-REV / V-REV / HV-REV	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Panasonic, Honeywell, Vicon	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	SUD-3080 : Ø141.2 x 105.5mm (05.56" x 4.15") / SUD-3080F : Ø140 x 115mm (05.51" x 4.53")	
Weight	SUD-3080 : 520g (1.15 lb) / SUD-3080F : 435g (0.96 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SUD-2080/2080F

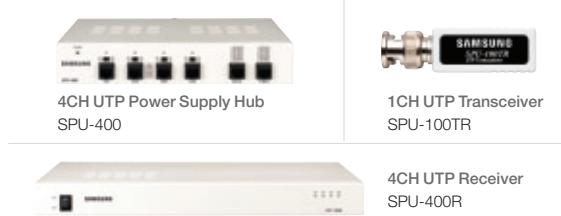
1/3" High Resolution UTP Dome Camera



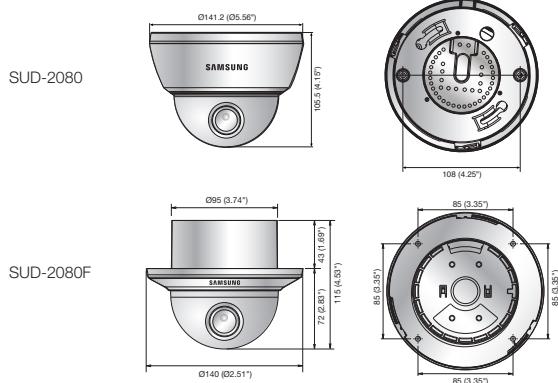
Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.15Lux@F1.2 (Color)
0.001Lux@F1.2 (B/W)
0.0003Lux@F1.2 (Color sens-up)
- Built in UTP transmitter
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range) • HLC (Highlight Compensation)
- DIS (Digital Image Stabilization) • Motion detection
- Coaxial & RS-485 control • 512x sens-up support
- Multi-language OSD • S/N ratio of 52dB
- Voltage : 12V DC / 24V AC / 28V AC

UTP Kit



Dimensions



Technical Specifications

	SUD-2080N/2080FN	SUD-2080P/2080FP
ELECTRICAL		
Input Voltage	12V DC / 24V AC / 28V AC	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.15Lux (50 IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0.001Lux (50 IRE@F1.2)	
S / N (Y signal)	52dB (AGC off, Weight on)	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
UTP Output	Built-in UTP TX [Maximum transmission length 900m (3,000ft) : Balanced differential signal 100Ω]	
Compatibilities	NVT, Nitec	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 340°	
Tilt Range	0° ~ 146°	
Rotate Range	0° ~ 340°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	Off / On (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700K ~ 11,000K)	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Shutter Mode	Fixed, ESC, Manual, A.FLK	
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Panasonic, Honeywell, Vicon	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 30% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	SUD-2080 : Ø141.2 x 105.5mm (Ø5.56" x 4.15") / SUD-2080F : Ø140 x 115mm (Ø5.51" x 4.53")	
Weight	SUD-2080 : 560g (1.23 lb) / SUD-2080F : 425g (0.94 lb)	CE (Class A), UL/cUL listed
Certifications	FCC (Class A), UL/cUL listed	

SCV-2080R

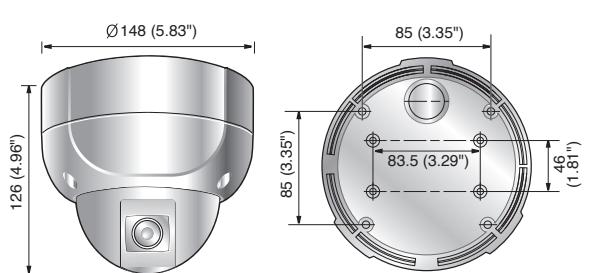
1/3" High Resolution IR LED Vandal-Resistant Dome Camera



Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- Built-in high-performance IR LEDs
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0Lux@F1.2 (LED on)
 - 0.15Lux@F1.2 (Color)
 - 0.0003Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage: 12V DC / 24V AC

Dimensions



Unit : mm (inch)

Technical Specifications

	SCV-2080RN	SCV-2080RP
ELECTRICAL		
Input Voltage	Dual (12V DC / 24VAC)	
Power Consumption	Max. 5W (LED On)	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0Lux (LED on)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 340°	
Tilt Range	0° ~ 146°	
Rotate Range	0° ~ 340°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (8 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø148 x 126mm (Ø5.83" x 4.96")	
Weight	1.3Kg (2.87 lb)	
IR LED	10ea	
IR Distance	30m (98.4ft)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCV-3120

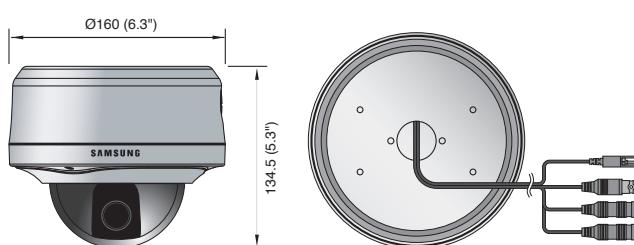
1/4" 12x High Resolution WDR Vandal-Resistant Dome Camera



Features

- 1/4" Super HAD color CCD
- Powerful 12x optical zoom (3.6 ~ 44.3mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 (Color)
0.001Lux@F1.65 (B/W)
0.07Lux@F1.65 (Color sens-up)
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions



Technical Specifications

	SCV-3120N	SCV-3120P
ELECTRICAL		
Input Voltage	Dual (12V DC/ 24V AC)	
Power Consumption	Max. 4W	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.7Lux (50IRE@F1.65), 0.07Lux (Sens-up, 512x) B/W : 0.001Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 44.3mm (F1.65 ~ 2.0)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	1.8m (5.91ft)	
Angular Field of View	H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)	
Focus	Auto / Manual / One-push	
PAN / TILT / ROTATE		
Pan Range	0° ~ 340°	
Tilt Range	0° ~ 146°	
Rotate Range	0° ~ 340°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Danish, Turkish
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Wide Dynamic Range	128x	160x
Digital Noise Reduction	On / Off	
Backlight Compensation	BLC (On / Off) / WDR	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit = 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø160 x 134.5mm (6.3" x 5.3")	
Weight	1.28Kg (2.82 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

SCV-3080

1/3" High Resolution WDR Vandal-Resistant Dome Camera

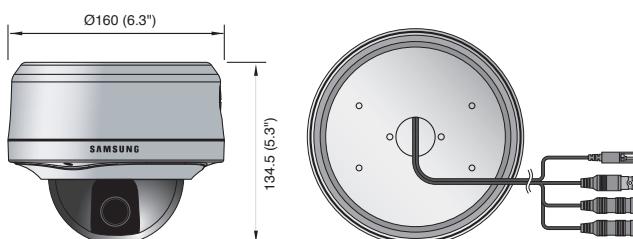


Features

- 1/3" Vertical double density color CCD
- Built-in SV-V, the latest generation of SV DSP engine
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- Built-in 3.9x (2.8 ~ 11mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.3Lux@F1.2 (Color)
0.01Lux@F1.2 (B/W)
0.0006Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Intelligent video analysis
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage: 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCV-3080N	SCV-3080P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24VAC)	
Power Consumption	Max. 3.8W (Heater off), Max. 8W (Heater on)	
VIDEO		
Imaging Device	1/3" Vertical double density interline CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.3Lux (50IRE@F1.2), 0.0006Lux (Sens-up, 512x) B/W : 0.01Lux (50 IRE@F1.2), 0.00002Lux (Sens-up 512x)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.9x (Manual)	
Focal Length	2.8 ~ 11mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 102°(Wide) ~ 28°(Tele) / V : 73°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 350°	
Tilt Range	0° ~ 90°	
Rotate Range	0° ~ 350°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Backlight Compensation	WDR / User BLC / HLC / SSDR / Off	
Wide Dynamic Range	128x	160x
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Intelligent Video Analytics	Detection / Tracking / Fixed / Moved / Alarm out	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Reverse	Off / H-REV / V-REV / HV-REV	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxH)	Ø160 x 134.5mm (06.3" x 5.3")	
Weight	1.22Kg (2.69 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCV-2080

1/3" High Resolution Vandal-Resistant Dome Camera

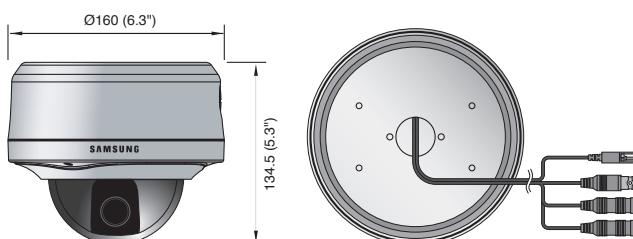


Features

- 1/3" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Built-in 3.6x (2.8 ~ 10mm) varifocal lens with auto iris
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.15Lux@F1.2 (Color)
0.001Lux@F1.2 (B/W)
0.0003Lux@F1.2 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCV-2080N	SCV-2080P
ELECTRICAL		
Input Voltage	Dual (12V DC / 24VAC)	
Power Consumption	Max. 7.8W	
VIDEO		
Imaging Device	1/3" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.15Lux (50IRE@F1.2), 0.0003Lux (Sens-up, 512x) B/W : 0.001Lux (50 IRE@F1.2)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	3.6x (Manual)	
Focal Length	2.8 ~ 10mm (F1.2)	
Max. Aperture Ratio	1 : 1.2(Wide) ~ 2.8(Tele)	
Min. Object Distance	0.2m (0.66ft)	
Angular Field of View	H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)	
PAN / TILT / ROTATE		
Pan Range	0° ~ 340°	
Tilt Range	0° ~ 146°	
Rotate Range	0° ~ 340°	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Zoom	On / Off (1x ~ 16x)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable limit ~ 512x)	
Gain Control	Low / High / Off	
White Balance	ATW / AWC / Manual / Indoor / Outdoor	
Electronic Shutter Speed	1/60 ~ 1/120,000sec	1/50 ~ 1/120,000sec
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø160 x 134.5mm (6.3" x 5.3")	
Weight	1.28Kg (2.82 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCV-2120

1/4" 12x High Resolution Vandal-Resistant Dome Camera

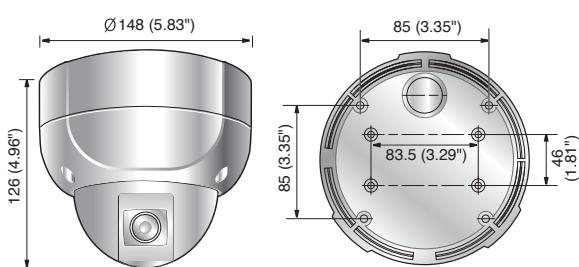


Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 12x optical zoom (3.9 ~ 46mm) and 16x digital zoom
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.2Lux@F1.65 (Color)
0.004Lux@F1.65 (B/W)
0.0004Lux@F1.65 (Color sens-up)
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 52dB
- Dual voltage: 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCV-2120N	SCV-2120P
ELECTRICAL		
Input Voltage	Dual (12V DC/ 24V AC)	
Power Consumption	Max. 3.5W	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x) B/W : 0.004Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.9 ~ 46mm (F1.65 ~ 1.88)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 1.88(Tele)	
Min. Object Distance	1.8m (5.91ft)	
Angular Field of View	H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese
Camera Title	On / Off (Displayed 15 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / Medium / High / Manual / Off	
White Balance	AWB / Manual / Indoor / Outdoor / ATW (1,700K ~ 11,000K)	
Electronic Shutter Speed	ES2 / FLK / Manual (1/60 ~ 1/120,000sec, 2x ~ 512x sec.)	ES2 / FLK / Manual (1/50 ~ 1/120,000sec, 2x ~ 512x sec.)
Flip / Mirror	On / Off	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø148 x 126mm (0.5.83" x 4.96")	
Weight	1.38Kg (3.04 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCP-3430H/2430H

1/4" 43x High Resolution WDR PTZ Dome Camera

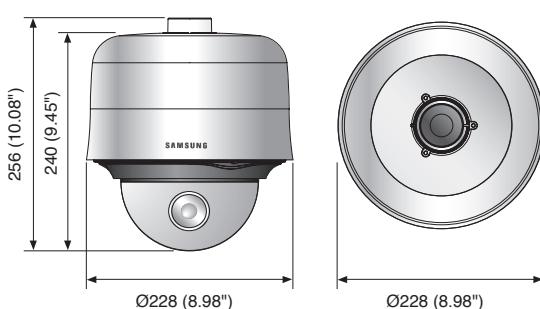


Features

- 1/4" Ex-view HAD PS color CCD : SCP-3430H
- 1/4" Super HAD color CCD : SCP-2430H
- Powerful 43x optical zoom (3.2 ~ 138.5mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCP-3430H
- True Day & Night (ICR) • VPS (Virtual Progressive Scan) : SCP-3430H
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCP-3430H / 0.2Lux@F1.65 : SCP-2430H (Color)
0.07Lux@F1.65 : SCP-3430H / 0.02Lux@F1.65 : SCP-2430H (B/W)
0.001Lux@F1.65 : SCP-3430H / 0.0004Lux@F1.65 : SCP-2430H (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 600°/sec
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Integrated Housing (IP66)
- Coaxial & RS-485/422 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Voltage : 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-3430HN/2430HN	SCP-3430HP/2430HP
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 16W / 47W (with fan/Heater)	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCP-3430H / 1/4" Super HAD CCD : SCP-2430H	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCP-3430H : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCP-2430H : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	43x (Optical), 16x (Digital)	
Focal Length	3.2 ~ 138.5mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)	
Focus	Auto / Manual / One AF	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Tilt Range	-6° ~ 186°	
Tilt Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Preset Positions	512	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Turkish, Portuguese
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCP-3430H	160x : SCP-3430H
Backlight Compensation	BLC (On / Off) / WDR (SCP-3430H)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485/422, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	8 In, 3 Out (2 Open collector, 1 Relay)	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø228 x 256mm (Ø8.98" x 10.08")	
Weight	3Kg (6.61 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

SCP-3430/2430

1/4" 43x High Resolution WDR PTZ Dome Camera

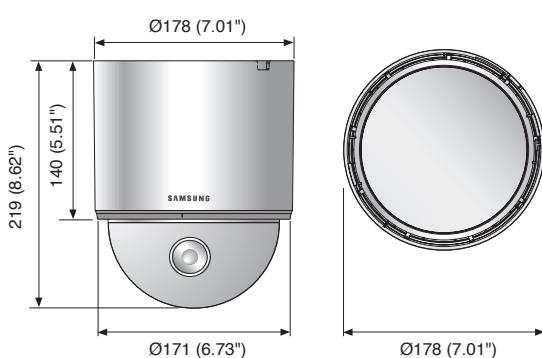


Features

- 1/4" Ex-view HAD PS color CCD : SCP-3430
- 1/4" Super HAD color CCD : SCP-2430
- Powerful 43x optical zoom (3.2 ~ 138.5mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCP-3430
- True Day & Night (ICR) • VPS (Virtual Progressive Scan) : SCP-3430
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCP-3430 / 0.2Lux@F1.65 : SCP-2430 (Color)
0.07Lux@F1.65 : SCP-3430 / 0.02Lux@F1.65 : SCP-2430 (B/W)
0.001Lux@F1.65 : SCP-3430 / 0.0004Lux@F1.65 : SCP-2430 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 600°/sec
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485/422 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Voltage : 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-3430N/2430N	SCP-3430P/2430P
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 11W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCP-3430 / 1/4" Super HAD CCD : SCP-2430	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCP-3430 : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCP-2430 : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	43x (Optical), 16x (Digital)	
Focal Length	3.2 ~ 138.5mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65 (Wide) ~ 3.7 (Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22° (Wide) ~ 1.47° (Tele) / V : 47.16° (Wide) ~ 1.1° (Tele)	
Focus	Auto / Manual / One AF	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Tilt Range	-6° ~ 186°	
Tilt Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Preset Positions	512	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Turkish, Portuguese
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCP-3430	160x : SCP-3430
Backlight Compensation	BLC (On / Off) / WDR (SCP-3430)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485/422, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	8 In, 3 Out (2 Open collector, 1 Relay)	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø178 x 219mm (07.01" x 8.62")	
Weight	2kg (4.41 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

A1

SAMSUNG

SCP-3250H/2250H

1/4" 25x High Resolution WDR PTZ Dome Camera



CAMERA

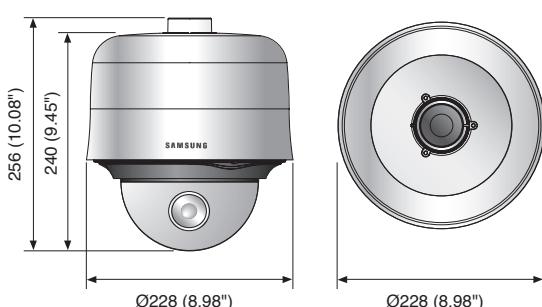


Features

- 1/4" Ex-view HAD PS color CCD : SCP-3250H
- 1/4" Super HAD color CCD : SCP-2250H
- Powerful 25x optical zoom (3.6 ~ 91mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCP-3250H
- True Day & Night (ICR) • VPS (Virtual Progressive Scan) : SCP-3250H
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCP-3250H / 0.2Lux@F1.65 : SCP-2250H (Color)
0.07Lux@F1.65 : SCP-3250H / 0.02Lux@F1.65 : SCP-2250H (B/W)
0.001Lux@F1.65 : SCP-3250H / 0.0004Lux@F1.65 : SCP-2250H (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 650°/sec
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Integrated Housing (IP66)
- Coaxial & RS-485/422 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Dual voltage : 12V DC / 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-3250HN/2250HN	SCP-3250HP/2250HP
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 16W / 47W (with fan/Heater)	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCP-3250H / 1/4" Super HAD CCD : SCP-2250H	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCP-3250H : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCP-2250H : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	25x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 91mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)	
Focus	Auto / Manual / One AF	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Tilt Range	-6° ~ 186°	
Tilt Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Preset Positions	512	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Turkish, Portuguese
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCP-3250H	160x : SCP-3250H
Backlight Compensation	BLC (On / Off) / WDR (SCP-3250H)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485/422, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	8 In, 3 Out (2 Open collector, 1 Relay)	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø228 x 256mm (Ø8.98" x 10.08")	
Weight	3Kg (6.61 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)

SCP-3250/2250

1/4" 25x High Resolution WDR PTZ Dome Camera

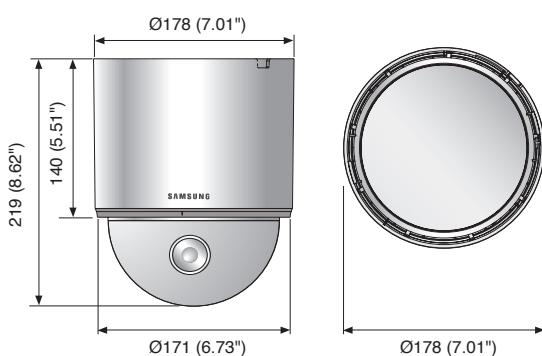


Features

- 1/4" Ex-view HAD PS color CCD : SCP-3250
- 1/4" Super HAD color CCD : SCP-2250
- Powerful 25x optical zoom (3.6 ~ 91mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL) : SCP-3250
- True Day & Night (ICR) • VPS (Virtual Progressive Scan) : SCP-3250
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 : SCP-3250 / 0.2Lux@F1.65 : SCP-2250 (Color)
0.07Lux@F1.65 : SCP-3250 / 0.02Lux@F1.65 : SCP-2250 (B/W)
0.001Lux@F1.65 : SCP-3250 / 0.0004Lux@F1.65 : SCP-2250 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 600°/sec
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485/422 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 52dB
- Voltage : 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-3250N/2250N	SCP-3250P/2250P
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 11W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD : SCP-3250 / 1/4" Super HAD CCD : SCP-2250	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace / Progressive	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	SCP-3250 : Color : 0.7Lux (50IRE@F1.65), 0.001Lux (Sens-up, 512x), B/W : 0.07Lux (50IRE@F1.65) SCP-2250 : Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x), B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	52dB	
Video Output	CVBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	25x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 91mm (F1.65 ~ 3.7)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	100cm (3.28ft)	
Angular Field of View	H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)	
Focus	Auto / Manual / One AF	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Tilt Range	-6° ~ 186°	
Tilt Speed	Preset : 600°/sec / Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)	
Preset Positions	512	
OPERATIONAL		
On Screen Display	English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean	English, French, German, Spanish, Italian, Chinese, Russian, Polish, Turkish, Portuguese
Camera Title	On / Off (Max. 54ea / 2 lines)	
Day & Night	Auto (ICR) / Extern / Color / B/W	
Motion Detection	Sensitivity 1 ~ 7 level	
Wide Dynamic Range	128x : SCP-3250	160x : SCP-3250
Backlight Compensation	BLC (On / Off) / WDR (SCP-3250)	
eXtended Dynamic Range	Low / Medium / High / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Off / Very low / Low / Medium / High / Very high / User / Fix	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW1 / ATW2 / AWC (Manual) / 3200°K / 5600°K	
Electronic Shutter Speed	1/100 ~ 1/10,000sec	
Digital Zoom	On / Off (2x ~ 16x)	
AGC	On / Off (Very Low / Low / Medium / High / Very High / User / Fix)	
PIP	On / Off	
Schedule	Day / Time schedule	
Communication	RS-485/422, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	8 In, 3 Out (2 Open collector, 1 Relay)	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø178 x 219mm (07.01" x 8.62")	
Weight	2Kg (4.41 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A)



SCP-3120

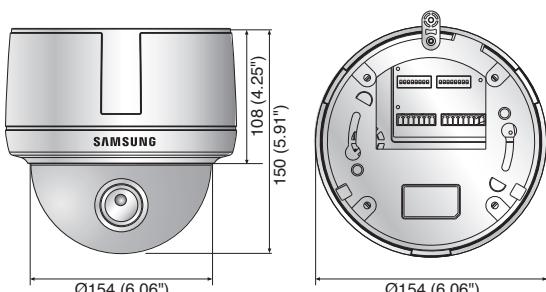
1/4" 12x High Resolution WDR PTZ Dome Camera



Features

- 1/4" Ex-view HAD PS color CCD
- Powerful 12x optical zoom (3.6 ~ 44.3mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 (Color)
0.07Lux@F1.65 (B/W)
0.001Lux@F1.65 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 650°/sec
- Privacy masking with 8 programmable zones (Polygonal mosaic)
- Two types of installation (Flush or surface mount)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 50dB
- Voltage : 24V AC

Dimensions



Technical Specifications

	SCP-3120N	SCP-3120P
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 12W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H: 15.734KHz / V: 59.94Hz	H: 15.625KHz / V: 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.7Lux (50 IRE@F1.65), 0.001Lux (Sens-up, 512x) B/W : 0.03Lux (50 IRE@F1.65)	
S / N (Y signal)	50dB	
Video Output	VBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 44.3mm (F1.65 ~ 2.0)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	0.2m(Wide), 0.8m(Tele)	
Angular Field of View	H: 54.44°(Wide) ~ 4.64°(Tele) / V: 41.42°(Wide) ~ 3.52°(Tele)	
Focus	Auto / Manual / One-shot	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio), Turbo 200°/sec	
Tilt Range	-5° ~ 185°	
Tilt Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)	
Preset Positions	255	
OPERATIONAL		
On Screen Display	English, French, German, Spanish, Italian, Portuguese, Korean	English, Chinese, French, German, Spanish, Italian, Portuguese
Camera Title	On / Off (Displayed 12 Characters)	
Day & Night	Auto (ICR) / Color / B/W	
Motion Detection	Off / Tracking / Detection	
Wide Dynamic Range	128x	160x
Backlight Compensation	BLC / WDR / Off	
eXtended Dynamic Range	Low / Medium / High / Off	
VPS (Virtual Progressive Scan)	On / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Low / Medium / High / Off	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW (In) / ATW (Out) / Manual / AWC	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
AGC	Off / Low / Medium / High / Manual	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	2 In, 2 Out	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø154 x 150mm (Ø6.06" x 5.91")	
Weight	1Kg (2.2 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed



SCP-3120V

1/4" 12x High Resolution WDR
Vandal-Resistant PTZ Dome Camera

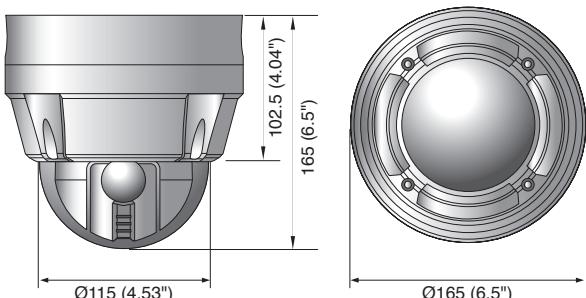


Features

- 1/4" Ex-view HAD PS color CCD
- Powerful 12x optical zoom (3.6 ~ 44.3mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 (Color)
0.07Lux@F1.65 (B/W)
0.001Lux@F1.65 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 650°/sec
- Privacy masking with 12 user programmable zones
- Protection against water & dust (IP66)
- Two types of installation (Flush or surface mount)
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 50dB
- Voltage : 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-3120VN	SCP-3120VP
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 45W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H: 15.734KHz / V: 59.94Hz	H: 15.625KHz / V: 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.7Lux (50 IRE@F1.65), 0.001Lux (Sens-up, 512x) B/W : 0.07Lux (50 IRE@F1.65)	
S / N (Y signal)	50dB	
Video Output	VBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 44.3mm (F1.65 ~ 2.0)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	0.2m(Wide), 0.8m(Tele)	
Angular Field of View	H: 54.44°(Wide) ~ 4.64°(Tele) / V: 41.42°(Wide) ~ 3.52°(Tele)	
Focus	Auto / Manual / One-shot	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio), Turbo 200°/sec	
Tilt Range	-5° ~ 185°	
Tilt Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)	
Preset Positions	255	
OPERATIONAL		
On Screen Display	English, French, German, Spanish, Italian, Portuguese, Korean	English, Chinese, French, German, Spanish, Italian, Portuguese
Camera Title	On / Off (Displayed 12 Characters)	
Day & Night	Auto (ICR) / Color / B/W	
Motion Detection	Off / Tracking / Detection	
Wide Dynamic Range	128x	160x
Backlight Compensation	BLC / WDR / Off	
eXtended Dynamic Range	Low / Medium / High / Off	
VPS (Virtual Progressive Scan)	On / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Low / Medium / High / Off	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW (In) / ATW (Out) / Manual / AWC	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
AGC	Off / Low / Medium / High / Manual	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	2 In, 2 Out	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø165 x 165mm (0.65" x 6.5")	
Weight	1.8kg (3.97 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCP-3120VH

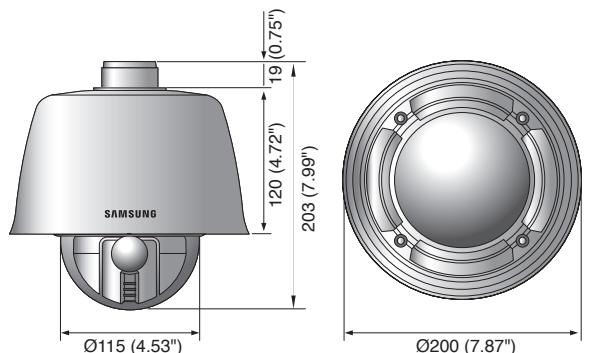
1/4" 12x High Resolution WDR
Vandal-Resistant PTZ Dome Camera



Features

- 1/4" Ex-view HAD PS color CCD
- Powerful 12x optical zoom (3.6 ~ 44.3mm) and 16x digital zoom
- Motion adaptive digital noise reduction (3D+2D)
- Powerful dynamic range of 128x (NTSC), 160x (PAL)
- True Day & Night (ICR) • VPS (Virtual Progressive Scan)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.7Lux@F1.65 (Color)
0.07Lux@F1.65 (B/W)
0.001Lux@F1.65 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 650°/sec
- Privacy masking with 12 user programmable zones
- Privacy masking with 12 programmable zones (Polygonal mosaic)
- Backlight Compensation (Area setting)
- Advanced motion detection function
- High shutter speed control by external trigger
- Integrated Housing (IP66)
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-Language OSD
- Intelligent video (Moved / Fixed)
- S/N ratio of 50dB
- Voltage : 24V AC

Dimensions



Technical Specifications

	SCP-3120VHN	SCP-3120VHP
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 45W	
VIDEO		
Imaging Device	1/4" Ex-view HAD PS CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.7Lux (50 IRE@F1.65), 0.001Lux (Sens-up, 512x) B/W : 0.07Lux (50 IRE@F1.65)	
S / N (Y signal)	50dB	
Video Output	VBS : 1.0 Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.6 ~ 44.3mm (F1.65 ~ 2.0)	
Max. Aperture Ratio	1 : 1.65(Wide) ~ 3.7(Tele)	
Min. Object Distance	0.2m(Wide), 0.8m(Tele)	
Angular Field of View	H : 54.44°(Wide) ~ 4.64°(Tele) / V : 41.42°(Wide) ~ 3.52°(Tele)	
Focus	Auto / Manual / One-shot	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio), Turbo 200°/sec	
Tilt Range	-5° ~ 185°	
Tilt Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)	
Preset Positions	255	
OPERATIONAL		
On Screen Display	English, French, German, Spanish, Italian, Portuguese, Korean	English, Chinese, French, German, Spanish, Italian, Portuguese
Camera Title	On / Off (Displayed 12 Characters)	
Day & Night	Auto (ICR) / Color / B/W	
Motion Detection	Off / Tracking / Detection	
Wide Dynamic Range	128x	160x
Backlight Compensation	BLC / WDR / Off	
exTended Dynamic Range	Low / Medium / High / Off	
VPS (Virtual Progressive Scan)	On / Off	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 polygonal programmable zones)	
2D+3D Noise Filter (A1)	Low / Medium / High / Off	
Sens-up (Frame Integration)	On / Off (Selectable limit ~ 512x)	
White Balance	ATW (In) / ATW (Out) / Manual / AWC	
Electronic Shutter Speed	1/60 ~ 1/10,000sec	1/50 ~ 1/10,000sec
Digital Zoom	On / Off (2x ~ 16x)	
AGC	Off / Low / Medium / High / Manual	
Schedule	Day / Time schedule	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	2 In, 2 Out	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	Ø200 x 203mm (07.87" x 7.99")	
Weight	2.4kg (5.29 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed

SCP-2120

1/4" 12x High Resolution PTZ Dome Camera

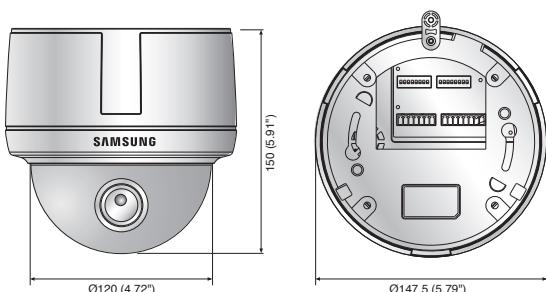


Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 12x optical zoom (3.9 ~ 46mm) and 16x digital zoom
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.2Lux@F1.65 (Color)
0.02Lux@F1.65 (B/W)
0.0004Lux@F1.65 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 650°/sec
- Privacy masking with 12 user programmable zones
- Two types of installation (Flush or surface mount)
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- Motion detection
- Coaxial & RS-485 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 50dB
- Voltage : 24V AC

Dimensions

Unit : mm (inch)



Technical Specifications

	SCP-2120N	SCP-2120P
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 12W	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / AC line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.2Lux (50IRE@F1.67), 0.0004Lux (Sens-up, 512x) B/W : 0.002Lux (50IRE@F1.67)	
S / N (Y signal)	50dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	12x (Optical), 16x (Digital)	
Focal Length	3.9 ~ 46mm (F1.67 ~ 1.88)	
Max. Aperture Ratio	1 : 1.67 (Wide) ~ 1.88 (Tele)	
Min. Object Distance	1.8m (5.91ft)	
Angular Field of View	H : 25.77° (Wide) ~ 2.55° (Tele) / V : 19.64° (Wide) ~ 1.69° (Tele)	
Focus	Auto / Manual / One-push	
Zoom Movement Speed	1.9sec	
Iris Control	Auto / Manual	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)	
Tilt Range	-5° ~ 185°	
Tilt Speed	Preset : 650°/sec / Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)	
Preset Positions	255	
Preset Accuracy	±0.1°	
PTZ Mode	Preset, Swing, Group, Tour	
OPERATIONAL		
On Screen Display	English, French, German, Spanish, Italian, Portuguese, Chinese, Korean	
Camera Title	On / Off (Displayed 12 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	Off / Tracking / Detection	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	Low / Medium / High / Off	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / Medium / High / Manual / Off	
White Balance	ATW (In) / ATW (Out) / Manual / AWC	
Electronic Shutter Speed	Auto (NTSC : 1/60 ~ 1/120,000sec, PAL : 1/50 ~ 1/120,000) / Manual / A.FLK	
Communication	RS-485, Coaxial control	
Protocol	Samsung-T, Samsung-E, Pelco-D, Pelco-P, Bosch, Honeywell, Vicon, Panasonic	
Alarm	2 In, 2 Out	
Digital Flip	On / Off	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxH)	Ø147.5 x 150mm (5.79" x 5.91")	
Weight	1.065Kg (2.35 lb)	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed



SCU-2370

1/4" 37x High Resolution Positioning System

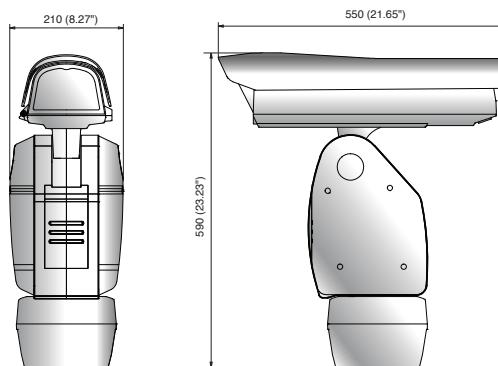
CAMERA



Features

- 1/4" Super HAD color CCD
- Based on W-V, the latest generation of Winner DSP engine
- Powerful 37x optical zoom (3.5 ~ 129.5mm) and 16x digital zoom
- SSNR III, Upgraded 2D/3D noise reduction technology
- Day & Night with ICR (Infrared Cutfilter Removal)
- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination of 0.2Lux@F1.65 (Color)
0.02Lux@F1.65 (B/W)
0.0004Lux@F1.65 (Color sens-up)
- 360° continuous rotation, High-speed pan & tilt at 100°/sec
- Privacy masking with 12 user programmable zones
- SSDR (Samsung Super Dynamic Range)
- HLC (Highlight Compensation)
- DIS (Digital Image Stabilization)
- Programmable 255 preset positions
- Multiple protocol support
- Motion detection
- Coaxial & RS-485/422 control
- 512x sens-up support
- Multi-language OSD
- S/N ratio of 50dB
- Voltage : 24V AC

Dimensions



Unit : mm (inch)

Technical Specifications

	SCU-2370N	SCU-2370P
ELECTRICAL		
Input Voltage	24V AC	
Power Consumption	Max. 80W (Max. 140W : Heater on)	
VIDEO		
Imaging Device	1/4" Super HAD CCD	
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Scanning System	2 : 1 Interlace	
Synchronization	Internal / Line lock	
Frequency	H : 15.734KHz / V : 59.94Hz	H : 15.625KHz / V : 50Hz
Horizontal Resolution	Color : 600TV lines (Min.) / B/W : 700TV lines (Min.)	
Min. Illumination	Color : 0.2Lux (50IRE@F1.65), 0.0004Lux (Sens-up, 512x) B/W : 0.02Lux (50IRE@F1.65)	
S / N (Y signal)	More than 50dB	
Video Output	CVBS : 1.0Vp-p / 75Ω composite	
LENS		
Zoom Ratio	37x (Optical), 16x (Digital)	
Focal Length	3.5 ~ 129.5mm (F1.6 ~ 3.9)	
Max. Aperture Ratio	1 : 1.6(Wide) ~ 3.9(Tele)	
Min. Object Distance	1.5m (4.92ft)	
Angular Field of View	H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)	
Focus	One-shot	
Zoom Movement Speed	2.5sec	
Iris Control	Auto / Manual	
PAN / TILT		
Pan Range	360° Endless	
Pan Speed	Preset : 100°/sec / Manual : 0.05°/sec ~ 40°/sec (64 step)	
Tilt Range	-85° ~ 40°	
Tilt Speed	Preset : 100°/sec / Manual : 0.05°/sec ~ 40°/sec (64 step)	
Preset Positions	255	
Preset Accuracy	±0.1°	
OPERATIONAL		
On Screen Display	English, French, German, Spanish, Italian, Portuguese, Chinese	
Camera Title	On / Off (Displayed 12 characters)	
Day & Night	Auto (ICR) / Color / B/W	
SSDR	On / Off (Level adjustable)	
Backlight Compensation	BLC / HLC / Off	
Motion Detection	On / Off (8 programmable zones)	
Digital Image Stabilization	On / Off	
Privacy Masking	On / Off (12 programmable zones)	
2D+3D Noise Filter (SSNR III)	On / Off (Level adjustable)	
Sens-up (Frame Integration)	Auto / Off (Selectable 2x ~ 512x)	
Gain Control	Low / Medium / High / Manual / Off	
White Balance	AWC / Manual / Indoor / Outdoor / ATW (1,700K ~ 11,000K)	
Electronic Shutter Speed	Auto (NTSC : 1/60 ~ 1/120,000sec, PAL : 1/50 ~ 1/120,000) / Manual / A.FLK	
Schedule	Day / Time schedule	
Communication	RS-485/422, Coaxial control	
Protocol	Samsung-T, Pelco-D, Pelco-P, Pelco Coaxitron, Panasonic, Honeywell, AD, Vicon, BOSCH, GE	
Alarm	3In, 1Out, 1Aux	
ENVIRONMENTAL		
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 90% RH	
MECHANICAL		
Dimension (WxHxD)	210 x 590 x 550mm (8.27" x 23.23" x 21.65")	
Weight	15Kg (33.07 lb)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	CE (Class A), UL/cUL listed



SCB-9051

Thermal Night Vision Camera

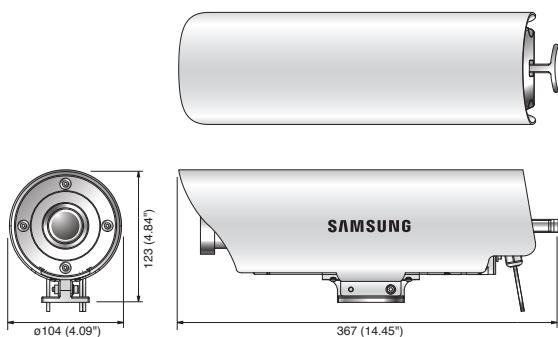


Features

- Built-in 50mm lens with micro bolometer sensor
- 1,000m of detection range without lighting
- 0.47mrad of IFOV (Instantaneous Field-of-View)
- Min. discernable temperature of 0.08°C
- IP66 Approved Dust/Waterproof
- Customizable OSD
- Light weight and effective cost
- RS-485 control

Dimensions

Unit : mm (inch)



Technical Specifications

	SCB-9051N	SCB-9051P
ELECTRICAL		
Input Voltage	24VAC	
Power Consumption	Max. 10.5W (22W when heater on)	
VIDEO		
Sensor Type	320(H) x 240(H) Uncooled VOX microbolometer	
Sensor Pitch	23.5µm x 23.5µm	
Measured Wavelength Range	8 ~ 14µm	
Video Ratio (Sensor)	30fps	25fps
Video Output	VBS : 1.0VP-P, 75Ω, composite	
LENS		
Focal Length	F1.4, f=50mm	
Focal Range	27m ~ ∞, Pan focus	
Viewing Angle (HxV)	9.2° x 6.9°	
IFOV (Instantaneous Field of View)	0.47mrad	
OPERATIONAL		
OSD	English, Japanese, Korean	
Sharpness	6 levels : Off ~ 5	
Brightness / Contrast	11 levels / (Auto, Manual : 10 levels)	
Digital Zoom	2x ~ 4x	
Noise Reduction Function	3D-DNR (4step : Low / Midium / High / Off)	
Polarity Function	B/W (Black & White) / W/B (White & Black)	
Communication	RS-485	
Protocol	Samsung-T, Pelco-D	
ENVIRONMENTAL		
Detecting temperature	Auto / Manual (2step) Low (-40°C ~ 150°C), High (0°C ~ 540°C)	
Operating Temperature / Humidity	-30°C ~ +55°C / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	ø104(W) x 123(H) x 367(D)mm (4.09" x 4.84" x 14.45")	
Weight	Approx. 2.2Kg (4.85 lb) (Including cables)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	

SCB-9050

Thermal Night Vision Camera

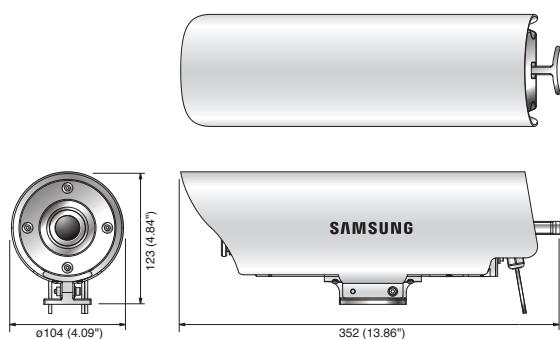


Features

- Outstanding 360m detection range with no lighting
- Intricate imaging with High-powered infrared sensor
- Min. discernable temperature of 0.08°C
- Color pattern
- IP66 Approved Dust/Waterproof
- Customizable OSD
- Light weight and effective cost
- RS-485 control

Dimensions

Unit : mm (inch)



Technical Specifications

	SCB-9050N	SCB-9050P
ELECTRICAL		
Input Voltage	24VAC	
Power Consumption	Max. 10.5W (22W when heater on)	
VIDEO		
Sensor Type	320(H) x 240(H) Uncooled VOX microbolometer	
Sensor Pitch	23.5µm x 23.5µm	
Measured Wavelength Range	8 ~ 14µm	
Video Ratio (Sensor)	30fps	25fps
Video Output	VBS : 1.0VP-P, 75Ω, composite	
LENS		
Focal Length	F1.4, f=50mm	
Focal Range	0.5m ~ ∞, Pan focus	
Viewing Angle (HxV)	30° x 22.8°	
IFOV (Instantaneous Field of View)	1.68mrad	
OPERATIONAL		
OSD	English, Japanese, Korean	
Sharpness	6 levels : Off ~ 5	
Brightness / Contrast	11 levels / (Auto, Manual : 10 levels)	
Digital Zoom	2x ~ 4x	
Noise Reduction Function	3D-DNR (4step : Low / Midium / High / Off)	
Polarity Function	B/W (Black & White) / W/B (White & Black)	
Communication	RS-485	
Protocol	Samsung-T, Pelco-D	
ENVIRONMENTAL		
Detecting temperature	Auto / Manual (2step) Low (-40°C ~ 150°C), High (0°C ~ 540°C)	
Operating Temperature / Humidity	-30°C ~ +55°C / Less than 90% RH	
MECHANICAL		
Dimension (WxHxD)	ø104(W) x 123(H) x 352(D)mm (4.09" x 4.84" x 13.86")	
Weight	Approx. 2.2Kg (4.85 lb) (Including cables)	
Ingress Protection	IP66	
Certifications	FCC (Class A), UL/cUL listed	

Your source for Professional Video Surveillance Systems



LENS

Samsung Security Solutions

SAMSUNG



Lens Selection

LENS

Lens Description	Model	Image	Mount	Image Format	Focal Length	Back Focal Length	Zoom Ratio	F. No	Minimum Angle of View	Operation			Dimensions (WxHxD)mm / inch	Weight (g / lb)
										Iris	Focus	Zoom		
Zoom Lens	SLA-12240		C	1/2"	12 ~ 240mm 0.47" ~ 9.45"	19.82mm 0.78"	20	1.6	38.9° ~ 1.9°	Auto	Motorized	Motorized	116 x 135 x 223.5mm 4.57" x 5.31" x 8.8"	2.6Kg 5.73 lb
	SLA-880				8 ~ 80mm 0.31" ~ 3.14"	15.3mm 0.6"	10	1.2	54.3° ~ 5.8°				70 x 81 x 123.5mm 2.76" x 3.19" x 4.86"	670g 1.48 lb
Varifocal Lens	SLA-3580DN		CS	1/3"	3.5 ~ 8mm 0.14" ~ 0.31"	8.7 ~ 14.7mm 0.34" ~ 0.58"	2.3	1.0	111.2° ~ 44.7°	DC	Manual	Manual	38.6 x 45.3 x 46mm 1.52" x 1.78" x 4.86"	54.5g 0.12 lb
	SLA-2810D				2.8 ~ 10mm 0.11" ~ 0.39"	7.8 ~ 17mm 0.3" ~ 0.67"	3	1.4	115.8° ~ 35.8°				40 x 46 x 57.2mm 1.57" x 1.81" x 2.25"	65g 0.14 lb
	SLA-550DA			1/2"	5 ~ 50mm 0.2" ~ 1.97"	7.6 ~ 11.5mm 0.3" ~ 0.45"	10	1.4	65.7° ~ 7.2°				44.5 x 50.8 x 66.2mm 1.75" x 2" x 2.61"	126g 0.28 lb
	SLA-612DN				6 ~ 12mm 0.24" ~ 0.47"	7.55 ~ 12.13mm 0.3" ~ 0.48"	2	1.6	81.4° ~ 38.8°				40.4 x 45.7 x 43.5mm 1.6" x 1.8" x 1.71"	53g 0.12 lb
	SLA-M2882			1/3"	2.8 ~ 8.2mm 0.11" ~ 0.32"	7.97 ~ 14.12mm 0.31" ~ 0.56"	2.9	1.4	116.5° ~ 42.4°				43.8 x 48.1 x 52mm 1.72" x 1.89" x 2.05"	100g 0.22 lb

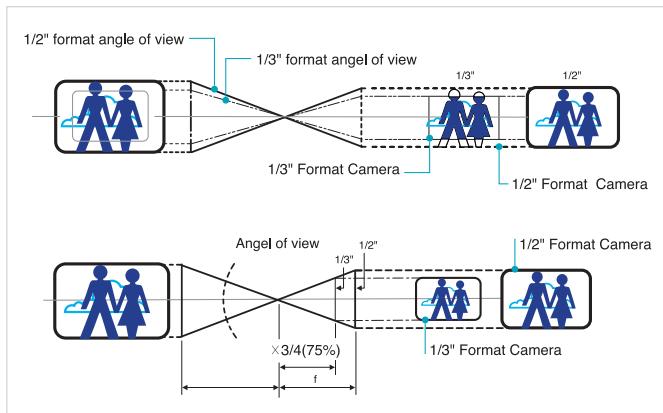
Field of View (1/3" TYPE CCD)

D(m) \ F(mm)	3.6	6	12	16	25	50	75	180
1	1.33 x 1.00	0.80 x 0.60	0.40 x 0.30	0.30 x 0.23	0.19 x 0.14	0.10 x 0.07	0.06 x 0.05	0.03 x 0.02
1.5	2.00 x 1.50	1.20 x 0.90	0.60 x 0.45	0.45 x 0.34	0.29 x 0.22	0.14 x 0.11	0.10 x 0.07	0.04 x 0.03
2	2.67 x 2.00	1.60 x 1.20	0.80 x 0.60	0.60 x 0.45	0.38 x 0.29	0.19 x 0.14	0.13 x 0.10	0.05 x 0.04
2.5	3.33 x 2.50	2.00 x 1.50	1.00 x 0.75	0.75 x 0.56	0.48 x 0.36	0.24 x 0.18	0.16 x 0.12	0.07 x 0.05
3	4.00 x 3.00	2.40 x 1.80	1.20 x 1.90	0.90 x 0.68	0.58 x 0.43	0.29 x 0.22	0.19 x 0.14	0.08 x 0.06
3.5	4.67 x 3.50	2.80 x 2.10	1.40 x 1.05	1.05 x 0.79	0.67 x 0.50	0.34 x 0.25	0.22 x 0.17	0.09 x 0.07
4	5.33 x 4.00	3.20 x 2.40	1.60 x 1.20	1.20 x 0.90	0.77 x 0.58	0.38 x 0.29	0.26 x 0.19	0.11 x 0.08
4.5	6.00 x 4.50	3.60 x 2.70	1.80 x 1.35	1.35 x 1.01	0.86 x 0.65	0.43 x 0.32	0.29 x 0.22	0.12 x 0.09
5	6.67 x 5.00	4.00 x 3.00	2.00 x 1.50	1.50 x 1.13	0.96 x 0.72	0.48 x 0.36	0.32 x 0.24	0.13 x 0.10
6	8.00 x 6.00	4.80 x 3.60	2.40 x 1.80	1.80 x 1.35	1.15 x 0.86	0.58 x 0.43	0.38 x 0.29	0.16 x 0.12
7	9.33 x 7.00	5.60 x 4.20	2.80 x 2.10	2.10 x 1.58	1.34 x 1.01	0.67 x 0.50	0.45 x 0.34	0.19 x 0.14
8	10.67 x 8.00	6.40 x 4.80	3.20 x 2.40	2.40 x 1.80	1.54 x 1.15	0.77 x 0.58	0.51 x 0.38	0.21 x 0.16
9	12.00 x 9.00	7.20 x 5.40	3.60 x 2.70	2.70 x 2.03	1.73 x 1.30	0.86 x 0.65	0.58 x 0.43	0.24 x 0.18
10	13.33 x 10.00	8.00 x 6.00	4.00 x 3.00	3.00 x 2.25	1.92 x 1.44	0.96 x 0.72	0.64 x 0.48	0.27 x 0.20
11	14.67 x 11.00	8.80 x 6.60	4.40 x 3.30	3.30 x 2.48	2.11 x 1.58	1.06 x 0.79	0.70 x 0.53	0.29 x 0.22
12	16.00 x 12.00	9.60 x 7.20	4.80 x 3.60	3.60 x 2.70	2.30 x 1.73	1.15 x 0.86	0.77 x 0.58	0.32 x 0.24
13	17.33 x 13.00	10.40 x 7.80	5.20 x 3.90	3.90 x 2.93	2.50 x 1.87	1.25 x 0.94	0.83 x 0.62	0.35 x 0.26
14	18.67 x 14.00	11.20 x 8.40	5.60 x 4.20	4.20 x 3.15	2.69 x 2.02	1.34 x 1.01	0.90 x 0.67	0.37 x 0.28
15	20.00 x 15.00	12.00 x 9.00	6.00 x 4.50	4.50 x 3.38	2.88 x 2.16	1.44 x 1.08	0.96 x 0.72	0.40 x 0.30
20	26.67 x 20.00	16.00 x 12.00	8.00 x 6.00	6.00 x 4.50	3.84 x 2.88	1.92 x 1.44	1.28 x 0.96	0.53 x 0.40
25	33.33 x 25.00	20.00 x 15.00	10.00 x 7.50	7.50 x 5.63	4.80 x 3.60	2.40 x 1.80	1.60 x 1.20	0.67 x 0.50
30	40.00 x 30.00	24.00 x 18.00	12.00 x 9.00	9.00 x 6.75	5.76 x 4.32	2.88 x 2.16	1.92 x 1.44	0.80 x 0.60
60	80.00 x 60.00	48.00 x 36.00	24.00 x 18.00	18.00 x 13.50	11.52 x 8.64	5.76 x 4.32	3.84 x 2.88	1.60 x 1.20
90	120.00 x 90.00	72.00 x 54.00	36.00 x 27.00	27.00 x 20.25	17.28 x 12.96	8.64 x 6.48	5.76 x 4.32	2.40 x 1.80
120	160.00 x 120.00	96.00 x 72.00	48.00 x 36.00	36.00 x 27.00	23.04 x 17.28	11.52 x 8.64	7.68 x 5.76	3.20 x 2.40
150	200.00 x 150.00	120.00 x 90.00	60.00 x 45.00	45.00 x 33.75	28.80 x 21.60	14.40 x 10.80	9.60 x 7.20	4.00 x 3.00

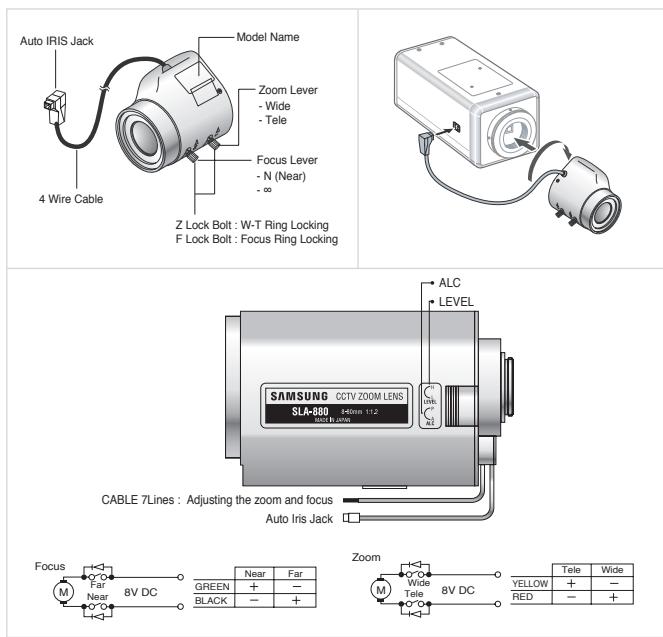


Lens Terms & Features

Lens Angle of View



Lens Parts & Names



Focal Length

The distance (in millimeters) from the lens to the surface of the image sensor. The shorter the distance, the wider the view : the longer the distance, the narrower (telephoto) the view.



Zoom Lens

A lens type that is capable of enlarge or reduce, on a continuously variable basis, the size of a televised image primarily by varying lens focal length.



C/CS-Mount

The two industry standards for mounting a lens on a camera. The C-Mount lens has a 17.5mm flange back distance. The CS-Mount lens has a 12.5mm flange back distance.



Manual / Auto Iris

Iris is the adjustable opening (mechanical diaphragm) through which light can pass and be regulated.

Manual iris

A Lens with a manual adjustment to set the iris opening (F stop) in a fixed position. Generally used for fixed lighting applications.

Auto iris

A lens in which the aperture automatically opens or closes to maintain proper light levels on the camera's pickup device.

Field of View at a Glance

Field of view formula

CCD	1/4"	1/3"	1/2"
Width	$(3.6 \times L) / f$	$(4.8 \times L) / f$	$(6.4 \times L) / f$
Height	$(2.7 \times L) / f$	$(3.6 \times L) / f$	$(4.8 \times L) / f$

W (m) : Width of scene

H (m) : Height of scene

f (mm) : Lens focal Length

L (m) : Distance between lens and subject



Varifocal Lens

A lens type that the focal length can be varied to give the exact image desired. It is similar to a manual zoom lens, except that a varifocal lens cannot be zoom tracked.

SLA-12240/880

1/2" C-mount Motorized 20x/10x Zoom Lens



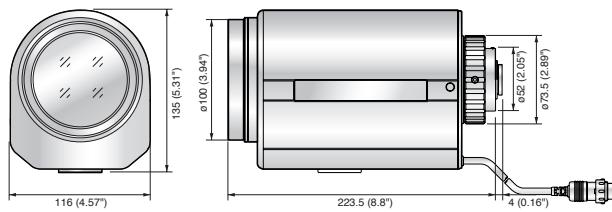
LENS

Features

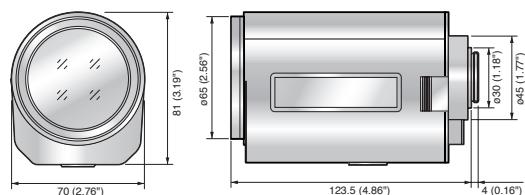
- Built-in 50mm lens with micro bolometer sensor
- Video type auto iris, C-mount
- 20x optical zoom, 12 ~ 240mm / 0.47" ~ 9.45" (SLA-12240)
- 10x optical zoom, 8 ~ 80mm / 0.31" ~ 3.15" (SLA-880)
- Sharp and clear image in low light with F1.6/F1.2
- Simple to install and adjust

Dimensions

Unit : mm (inch)



SLA-12240



SLA-880

Technical Specifications

	SLA-12240	SLA-880	
CCD	1/2"	1/2"	1/3"
Iris Type	Auto Iris (Video)		
Object Distance	2.8m ~ ∞	0.2m ~ ∞	
Zoom	20x	10x	
Mount	C-Mount		
Focal Length	12 ~ 240mm / 0.47" ~ 9.45"	8 ~ 80mm / 0.31" ~ 3.15"	
Max. Aperture Ratio	F 1.6	F 1.2	
Angle of View	Diagonal	38.9° ~ 1.9°	54.3° ~ 5.8°
	Horizontal	30.8° ~ 1.6°	44.0° ~ 4.7°
	Vertical	23° ~ 1.2°	33.3° ~ 3.5°
Operation	Iris	F 1.6 ~ F 720C	F 1.2 ~ F 560C
	Focus	2.8m ~ ∞	1.5m ~ ∞
	Zoom	12 ~ 240mm / 0.47" ~ 9.45"	8 ~ 80mm / 0.31" ~ 3.15"
Control	Iris	3.3V DC	8.5V DC ~ 16V DC
	Focus	6 ~ 12V DC	8V DC
	Zoom	6 ~ 12V DC	8V DC
Object Dimension	240mm : 66mm x 50mm	80mm : 123mm x 92mm	
at M.O.D.	9.45" : 2.6" x 1.97"	3.15" : 4.84" x 3.62"	
Back Focal Length	19.82mm / 0.78"	15.3mm / 0.6"	
Flange Back Length	17.526mm / 0.69"	17.526mm / 0.69"	
Preset	Built-in	-	
Input Signal	Video Signal (V or VS)		
Sensitivity Adjustment	0.5V(p-p) ~ 1.0V(p-p) (Video Signal)		
Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)		
Dimensions (WxHxD)	116 x 135 x 223.5mm (4.57" x 5.31" x 8.8")	70 x 81 x 123.5mm (2.76" x 3.19" x 4.86")	
Weight	2.6Kg (5.73 lb)	670g (1.48 lb)	

SLA-3580DN/2810D/ 550DA/612DN/ M2882

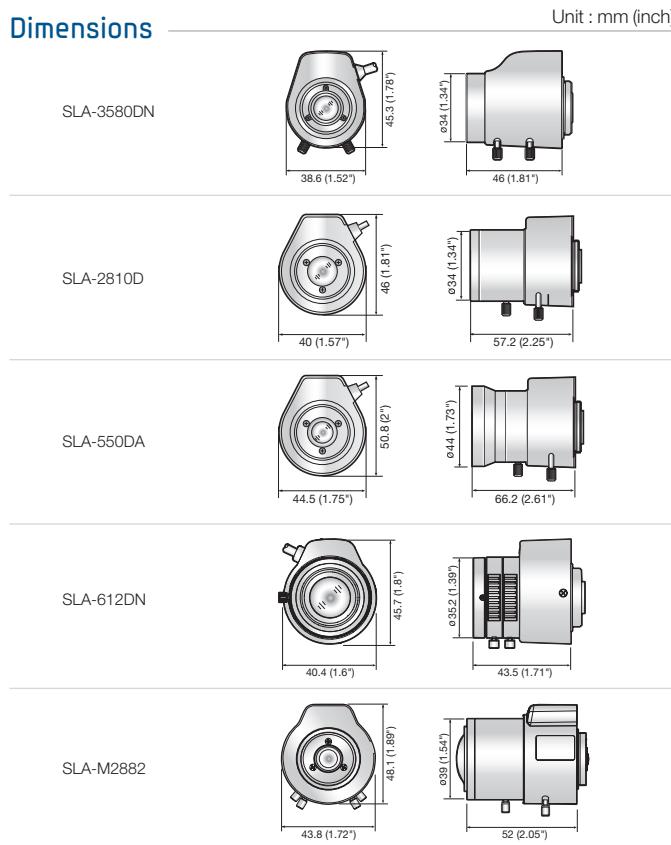
1/3", 1/2" CS-mount Auto Iris Lens



Features

- F1.0 (SLA-3580DN), F1.4 (SLA-2810D/550DA/M2882)
- F1.6 (SLA-612DN) DC Type auto iris
- Varifocal 3.5 ~ 8mm / 0.14" ~ 0.31" (SLA-3580DN)
2.8 ~ 10mm / 0.11" ~ 0.39" (SLA-2810D)
5 ~ 50mm / 0.2" ~ 1.97" (SLA-550DA)
- 2.8 ~ 8.2mm / 0.11" ~ 0.32" (SLA-M2882)
6 ~ 12mm / 0.24" ~ 0.47" (SLA-612DN)
- Excellent low light performance, Simple to install and adjust
- High quality, compact design

Dimensions



Technical Specifications

	SLA-3580DN	SLA-2810D	SLA-550DA	SLA-612DN	SLA-M2882	
CCD	1/3"	1/3"	1/3"	1/2"	1/3"	
Focal Length	3.5 ~ 8mm 0.14" ~ 0.31"	2.8 ~ 10mm 0.11" ~ 0.39"	5 ~ 50mm 0.2" ~ 1.97"	6 ~ 12mm 0.24" ~ 0.47"	2.8 ~ 8.2mm 0.11" ~ 0.32"	
Max. Aperture Ratio	1 : 1 ~ 360	1 : 1.4 ~ 360	1 : 1.4 ~ 360	1 : 1.6 ~ 300	1 : 1.4 ~ 360	
Max. Image Format	4.8(H) x 3.6(V)	4.8(H) x 3.6(V)	4.8(H) x 3.6(V)	6.4(H) x 4.8(V)	4.8(H) x 3.6(V)	
Iris	Auto (F1.0 ~ 360)	Auto (F1.4 ~ 360)	Auto (F1.4 ~ 360)	Auto (F1.6 ~ 300)	Auto (F1.4 ~ 360)	
Operation	Focus	Manual	Manual	Manual	Manual	
	Zoom	Manual	Manual	Manual	Manual	
Angle of View	Diagonal Horizontal Vertical	111.2° ~ 44.7° 83.5° ~ 35.6° 60.4° ~ 26.6°	115.8° ~ 35.3° 93.7° ~ 28.3° 70.6° ~ 21.2°	65.7° ~ 7.2° 52.7° ~ 5.7° 39.6° ~ 4.3°	86.4° ~ 38.8° 65.3° ~ 30.8° 47.4° ~ 23°	116.5° ~ 42.4° 94.2° ~ 34.1° 71° ~ 25.6°
Iris Type	DC	DC	DC	DC	DC	
Effective Lens	Front 017.5mm 00.69"	020.5mm 00.81"	037.7mm 01.48"	017.9mm 00.7"	026mm 01.02"	
Aperture	Rear 08.8mm 00.37"	08.8mm 00.35"	010mm 00.4"	09mm 00.35"	08.6mm 00.34"	
Back Focal Length	8.7 ~ 14.7mm 0.34" ~ 0.58"	7.8 ~ 17mm 0.3" ~ 0.67"	7.6 ~ 11.5mm 0.3" ~ 0.45"	7.55 ~ 12.13mm 0.3" ~ 0.48"	7.97 ~ 14.12mm 0.31" ~ 0.56"	
Flange Back Length	12.5mm / 0.49"	12.5mm / 0.49"	12.5mm / 0.49"	12.5mm / 0.49"	12.5mm / 0.49"	
Mount	CS-mount	CS-mount	CS-mount	CS-mount	CS-mount	
Dimensions (WxHxD)	38.6 x 45.3 x 46mm (1.52" x 1.78" x 1.81")	40 x 46 x 57.2mm (1.57" x 1.81" x 2.25")	44.5 x 50.8 x 66.2mm (1.75" x 2" x 2.61")	40.4 x 45.7 x 43.5mm (1.6" x 1.8" x 1.71")	43.8 x 48.1 x 52mm (1.72" x 1.89" x 2.05")	
Weight	54.5g (0.12 lb)	65g (0.14 lb)	126g (0.28 lb)	53g (0.12 lb)	100g (0.22 lb)	